SOUTHEASTERN BIOLOGY



Volume 54

January, 2007

Number 1

B

ASB 68TH ANNUAL MEETING

APRIL 18-21, 2007

ASB

QH301

v. 54 B

no. 1 Jan 2007 The University of South Carolina Columbia, South Carolina

ASB

ASB

ASB

See Page 1 and Consult Website http://www.asb.appstate.edu/



The Caroliniana Library, University of South Carolina, Columbia. Built in 1840, it is the first freestanding college library in the USA.

ASB

ASB

The Official Publication of
The Association of Southeastern Biologists
http://www.asb.appstate.edu/

SOUTHEASTERN BIOLOGY

(ISSN 1533-8436)

SOUTHEASTERN BIOLOGY (ISSN 1533-8436) is published quarterly in January, April, September, and December by the Association of Southeastern Biologists, Inc., Carolina Biological Supply Co., 2700 York Road, Burlington, NC 27215. Periodicals postage paid at Burlington, NC, and additional mailing offices. POSTMASTER: please send address changes to the SOUTHEASTERN BIOLOGY business manager, Tim Atkinson, Carolina Biological Supply Co., 2700 York Road, Burlington, NC 27215. ASB members receive the SOUTHEASTERN BIOLOGY as part of their membership dues. For non-members, the cost is \$10.00 per issue.

All contributions, inquiries about missing numbers and other matters should be addressed to the Print Editor. News items should be sent to the News Editor. Send books to be reviewed to the Book Review Editor. Printed by Allen Press, 810 East 10th Street, Lawrence, KS 66044.

| Print EditorJames D. Caponetti, Division of Biology, University of Tennessee, Knoxville, TN 37996-0830; (865) 974-6841; FAX (865) 974-4057; jcaponet@utk.edu. |
|---|
| Associate Editor Debbie Moore, Department of Natural Sciences, Troy University, P.O. Box 8368, Dothan, AL 36304-8368; (334) 983-6556, ext. 250; FAX (334) 983-6322; dsmoore@troy.edu. |
| Web Editor |
| Business Manager Tim Atkinson, Carolina Biological Supply Co., 2700 York Road, Burlington, NC 27215; (336) 538-6224; tim.atkinson@carolina.com. |
| News Editor Ricky Fiorillo, Department of Biology, University of Louisiana at Monroe, Monroe, LA 71209; (318) 342-1797; FAX (318) 342-3312; fiorillo@ulm.edu. |
| Book Review Editor Debbie Moore, Department of Natural Sciences, Troy University, P.O. Box 8368, Dothan, AL 36304-8368; (334) 983-6556, ext. 250; FAX (334) 983-6322; dsmoore@troy.edu. |
| Meetings Coordinator. Scott Jewell, P.O. Box 1088, Mebane, NC 27302; Office (336) 421-0034; FAX (336) 421-3425; Cell (336) 213-7373; a2zconvention@yahoo.com. |
| ASB OFFICERS |
| President Kim Marie Tolson, Dept. of Biology, University of Louisiana, Monroe, LA 71209-0520; (318) 342-1805; FAX (318) 342-3312; tolson@ulm.edu. |
| President-elect W. Michael Dennis, Breedlove, Dennis and Associates, Inc., 330 W. Canton Ave., Winter Park, FL 32789; (407) 677-1882; FAX (407) 657-7008; (800) 304-1882; mike@bda-inc.com. |
| Vice-PresidentBonnie Kelley, Dept. of Biology, University of North Carolina, Pembroke, NC 28372-1510; (910) 521-6419; kelley@uncp.edu. |
| Past President Dwayne A. Wise, Dept. of Biological Sciences, P. O. Drawer GY, Mississippi State University, Mississippi State, MS 39762; (662) 325-7579; FAX (662) 325-7939; daw1@ra.msstate.edu. |
| Secretary Debbie Moore, Department of Natural Sciences, Troy University, P.O. Box 8368, Dothan, AL 36304-8368; (334) 983-6556, ext. 250; FAX (334) 983-6322; dsmoore@troy.edu. |
| TreasurerTim Atkinson, Carolina Biological Supply Co., 2700 York Road, Burlington, NC 27215; (336) 538-6224; tim.atkinson@carolina.com. |
| Membership Officer Deborah Atkinson, Office of Continuing Education, School of Public Health, University of North Carolina, CB#8165, 400 Roberson Street, Chapel Hill, NC 27599-8165; (919) 843-6892; FAX (919) 966-5692; datkinso@email.unc.edu. |
| Archivist |

Executive Committee Members-at-Large

- 2007: Elaine J. Davis, Dept. of Natural Sciences, Bowie State University, 14000Jericho Park Rd., Bowie, MD 20715; (301) 860-3876; edavis@bowiestate.edu.
 - Scott Franklin, Dept. of Biology, University of Memphis, Ellington Hall, 3700 Walker Ave., Memphis, TN 38152; (901) 678-5539; FAX (901) 678-4746; sfrankli@memphis.edu.
- 2008: Jennifer J. Davis, Dept. of Biology, Shorter College, Rome, GA 30161; (706) 233-7292; jdavis@shorter.edu. Dennis C. Haney, Dept. of Biology, Furman University, Greenville, SC 29613-0418; (864) 294-2050; FAX (864) 294-2058; dennis.haney@furman.edu.
- 2009: Donald H. Roush, Department of Biology, University of North Alabama, P. O. Box 5181, Florence, AL 35632; (256) 765-4435; FAX (256) 765-4430; ahrouse@una.edu.
 - Robert Wayne Van Devender, Department of Biology, Appalachian State University, 572 Rivers Street, Boone, NC 28608; (828) 262-6907; (828) 262-2127; vandevenderr@appstate.edu.

Purpose

The purpose of this association shall be to promote the advancement of biology as a science by encouraging research, the imparting of knowledge, the application of knowledge to the solution of biological problems, and the preservation of biological resources. The ASB has representation in Section G Committee of the AAAS. Varying types of membership are available to individuals and institutions. See inside back cover.

TIME AND PLACE OF FUTURE MEETINGS

- 2007 April 18-21: Hosted by the University of South Carolina, Columbia, South Carolina.
- 2008 April 16-19: Co-hosted by Furman University, Greenville, South Carolina, and Wofford College, Spartanburg, South Carolina.

The University of South Carolina, Columbia

is proud to host the



68th Annual Meeting of the 2007 Association of Southeastern Biologists April 18 – 21, 2007, Columbia, SC Columbia Metropolitan Convention Center

ASB, the 70th Year Still sharing knowledge and friendships dear

This four-day event brings together approximately 800 biologists from across the southeastern United States. The meeting features a distinguished plenary speaker, special symposia, field trips, oral and poster presentations, workshops, networking and social events, and more.

The Annual Meeting provides you with the exclusive opportunity to showcase your products and/or services to this large and important audience of faculty, students, researchers, conservation workers, military and government personnel, and business professionals with a common interest in biological issues. Interests are diverse, and range from genetics and molecular biology, to physiology and population biology, to community and ecosystem ecology and systematics.

About ASB: The Association of Southeastern Biologists (ASB) was established in 1937 by biologists concerned with the quality of biological research in the southeastern United States. Today, ASB is the largest regional biology association in the country, and is committed to the advancement of biology as a science by the promotion of science education, research, and the application of scientific knowledge to human problems.

ASB Web Site: Many thanks to Dr Terry Richardson, University of North Alabama, for serving many years as the ASB Web Editor and ASB Secretary. Many thanks to Dr Dwayne Wise, Mississippi State University for launching ASB's new web site. Please visit our new and exciting web site: www.asb.appstate.edu. Many new features have been added, register on-line for our Annual Meeting, view photos, inquire about career opportunities and more.

Silent Auction: Once again, ASB will have a Silent Auction in the Exhibit Hall. 100% of all proceeds will benefit student travel to the Annual Meeting. Last year's Silent Auction was a big success. Let's plan on another successful event to assist students with their travel expenses to the meeting in Columbia.

The University of South Carolina, Columbia

The University of South Carolina will host the 68th annual meeting of the ASB in celebration of the association's 70th year. ASB did not hold an annual meeting in two successive years during World War II. Most events of the meeting will take place in the new Columbia Metropolitan Convention Center located in the *Vista* section of the city close to a variety of fine restaurants, fast-food establishments, coffee houses, pubs, and specialty shops. The traditional Thursday evening social occasion, which evolved from the "Smoker Social" of the early years when smoking was cool, will be held in the patio/pool area of the Strom Thurmond Wellness Center and will feature award-winning barbeque accompanied by traditional side dishes and beverages.

Chartered in 1801 as South Carolina College with its first students, all nine of them, arriving in 1805, the University of South Carolina has grown through times of good fortune and tragedy into a large research university of 28,000 students. Undergraduate and graduate programs are offered in the College of Arts and Sciences and also in the professional colleges of Engineering, Business Administration, Education, Nursing, Medicine, and Pharmacy. Regional campuses of the university are located in Aiken, Beaufort, Lancaster, Salkehatchie, Spartanburg, Sumter, and Union.

BIOLOGICAL SCIENCE RESEARCH AT USC

Lewis H. Bowman: Small RNAs including small interfering RNAs (siRNAs) and microRNAs (miRNAs) have emerged as important regulators of plant defense and development. Future research focuses on the mechanisms controlling their biogenesis and function.

Erin Connolly: Research focuses on elucidating molecular mechanisms that control iron uptake and homeostasis in plants specifically, to uncover the genes and gene products that control iron uptake and distribution to the various tissues, cells and organelles. Understanding of the mechanisms for iron uptake and homeostasis in plants should facilitate the development of plants with enhanced levels of bioavailable iron.

Bert Ely: Research focuses on population genetics. Current projects include: 1) the African American DNA Roots project to analyze diversity among West African ethnic groups; 2) an analysis of genetic diversity among genes thought to be involved in certain types of breast cancer; 3) determination of the genetic relatedness of populations of striped bass and black sea bass. For more information: www.biol.sc.edu/~elygen.

Michael R. Felder: Research that addresses the pathology of alcohol metabolism makes use of transgenic and knockout mouse models. Studies focus on the regulation of alcohol dehydrogenase expression by distal elements.

Robert Feller: Research documents and quantifies the impact of predator-prey interactions of epibenthic shrimp and crabs that feed on the benthos in estuarine systems. Field and laboratory manipulative techniques and immunochemical methods are used to characterize trophic interactions. These studies are important for understanding whether prey communities are strongly or weakly influenced by top-down controls.

Travis Glenn: Research at USC and UGA Savannah River Ecology Laboratory is focused on areas of Molecular Ecology, Environmental Genomics, Reptilian Genomics, Conservation Genetics, and Genotoxiciology. Study organisms range from alligators to bacteria and include fish, Peromyscus, red pandas and Whooping cranes. For more information please see: http://baddna.srel.edu/.

Brian Helmuth: The effects of global climate change on coastal ecosystems are examined by field studies, mathematical modeling, and remote sensing techniques used to forecast damage to intertidal and coral reef ecosystems. To work with resource managers and conservation biologists to "triage" the effects of global warming is an ongoing goal. http://www.biol.sc.edu/~helmuthlab.

Beth Krizek: Flowering plants display a remarkable diversity in the morphologies of their flowers. We are studying the molecular basis of several floral features (such as organ size and organ fusion) that contribute to morphological diversity. We use molecular, genetic, and biochemical approaches with the model plant *Arabidopsis thaliana* to characterize the pathways regulating these aspects of flower development

Robert Lawther: Dr. Lawther's research interest is the regulation of gene expression. Currently, he is collaborating with Dr Michael Felder in an analysis of the expression of alcohol dehydrogenase in mice.

David Lincoln: Studies focus on the role of chemically mediated interactions in terrestrial and marine communities where chemical signals and behavioral responses form a common structure across diverse communities and taxa. Current research emphasizes the coevolved symbiosis between odorous plant defenses and associative learning in parasitoid wasps.

James Morris: Research in my lab centers on the ecology of saltmarshes with special emphasis on their biogeochemistry, the physiological ecology of their plants, and the effects of sea level rise on the ecology of salt marshes.

Tim Mousseau: Conducts research concerning the evolution of adaptations to changing environments. Of particular interest are the evolution of life histories, reproductive behavior and adaptive maternal effects in insects and birds. Recent studies address the evolutionary and ecological consequences of prolonged exposure to low-level radioactive contaminants on birds and arthropods inhabiting the Chernobyl region of Ukraine.

John Nelson: Curator of the A. C. Moore Herbarium. His research involves the distribution of plants in South Carolina and the Southeast. Recent field work includes studies of vegetation within blackwater creeks of the sandhills, and

botanical inventory of Sandy Island (Georgetown County SC). His taxonomic studies center on the genus *Stachys* (Lamiaceae).

Rekha Patel: Interferons have antiviral and antiproliferative activities, thus making them attractive for use in cancer therapy. Research focuses on understanding how interferon induced protein kinase PKR regulates cell proliferation and programmed cell death and involves study of protein-protein interactions mainly to elucidate PKR regulation by activators and inhibitors.

James L. Pinckney: Research in marine ecology with special emphases on primary producers, the regulation of microalgal community structure by biotic and abiotic mechanisms, and the effects of extreme environments on microalgal physiology. Current projects include the impact of Hurricane Katrina on phytoplankton in Lake Pontchartrain and the effects of agricultural herbicides on estuarine phytoplankton assemblages. http://www.biol.sc.edu/~jpinckney/.

J. M. Quattro: Research reflects a broad interest in the mechanisms of genetic evolution at several fundamental levels. Genetics studies of marine fishes and mollusks, address the processes that shape the underlying structure of marine populations and use sequence analyses of nuclear and mitochondrial DNA genes as markers of population differentiation. Interest centers on spatial and temporal stability of gene frequencies.

Tammi Richardson: Work in my lab focuses on interactions between environmental factors (light, nutrients, and temperature) and phytoplankton growth and taxonomic composition in aquatic ecosystems.

David Reisman: Cis- and trans-acting factors affecting expression of the p53 tumor suppressor gene; analysis of oncogenic activities of mutant p53 genes. The role of mutant p53 in promoting cancer metastasis.

Roger Sawyer: β keratin multi-gene family analysis from chicken genome data and sequences from other bird species should clarify regulation during appendage morphogenesis. A cluster of β keratin genes on chromosome 27 in chicken indicates many duplication events in this family. The phylogeny of β keratin sequences suggests repeated gene duplications/ deletions over the evolutionary history of birds.

Deanna Smith: Biophysics, biochemistry, and cell biology in this laboratory are applied to studies of cell division and movement especially in a developing embryo. Of special interest is a microtubule motor protein and the dynein regulatory protein, Lis1, linked to a brain disorder in humans. Studies focus on Lis1 and dynein in axon/dendrite, organelle transport in the mature brain and their role in changes in dynamic cellular processes.

Stephen E. Stancyk: Research in the broad area of marine invertebrate reproductive ecology and life histories. Studies include effects of sublethal tissue loss on the life history and reproduction of ophiuroid echinoderms (brittlestars) and of pollutants (zinc, cadmium) on the regeneration process. Other studies are directed to starfish mass mortalities in South Carolina and predation interactions between starfish and brittlestars.

Johannes Stratmann: When plants are wounded by insects, they fight their attackers by inducing sophisticated defense responses. Studies on the molecular

mechanisms underlying these defense responses in tomato plants employ state-of-the-art techniques in molecular biology, biochemistry, and cell biology. See: http://www.biol.sc.edu/faculty/stratmann.html.

Vicki Vance: RNA silencing is an anti-viral defense pathway in plants that acts via small regulatory RNAs (siRNAs). Certain plant viruses encode proteins that suppress the RNA silencing pathway. Work is focused on a viral suppressor (HC-Pro) with emphasis on the molecular mechanism by which this protein blocks silencing and on the role of plant proteins in the process.

Alan S. Waldman: Research is focused on the mechanisms that maintain genome stability. Several genetic diseases, e.g., cancer, involve a breakdown of such mechanisms and are associated with abnormal chromosomal rearrangements. A molecular biological approach using mutant mammalian cell lines and modern genetic tools, is expected to provide insight into the proteins and pathways that help repair DNA damage and preserve genetic integrity.

Columbia, South Carolina

Columbia, the capital and largest city in South Carolina, has a population of 121,395 with an estimated 689,878 in the metropolitan area. The city was named for Christopher Columbus, and the name is a poetic one for "America". Columbia was chosen to be the site of South Carolina's new state capital in 1786, chartered as a town in 1805 and as a city in 1854. It was the second planned city in the United States (Savannah was the first), yet, it did not have a single paved street until Main Street was surfaced in 1908. It was recently one of 30 communities named "America's Most Livable Communities", an award given by the Washington-based non-profit "Partners for Livable Communities" to honor communities that are developing themselves in the creative economy.

The Columbia Metropolitan Convention Center

The Columbia Metropolitan Convention Center is a 142,500 square foot meeting/exhibit facility that has a 17,200 square foot exhibit hall. Inside, visitors will move through expansive concourses and prefunction spaces. Daylight from the glass skylights and exterior walls enhance the rich interior palette drawn from the community's historic and natural environment. The two-story facility is conveniently located in a new upscale shopping/entertainment district known as *The Congaree Vista*. The Vista offers something for everyone in its array of restaurants, bars, and entertainment. From fine dining to more casual fare, the Vista features both diverse cuisine and a great atmosphere. The whole scene comes alive at night with theatre and live music.

ASB 2007 Tentative Schedule

| DAY/TIME | EVENT | LOCATION |
|---|---|---|
| Wednesday, April 18 9:00 am-4:00 pm 12noon-2 pm 8:00am-8:00 pm | Exhibitor Move-In Exhibitor Pizza Party (Exhibitors Only Registration Open | Exhibit Hall Exhibit Hall Convention Center |
| 8:00am-8:00 pm 2:00-6:00 pm | Cyber Café Open ASB Executive Committee Meeting | Exhibit Hall Meeting Room |
| 2:00-6:00 pm 4:00-5:30 pm | SABS Council Meeting Exhibitor's Workshop "Inquiry-based Rat Dissection with Ca Solution Specimens" | Meeting Room Meeting Room arolina's Perfect |
| 7:30-9:00 pm | ASB Plenary Session | Ballroom |
| 9:00-10:30 pm | Welcome Reception Light hors d'oeuvres. <i>Exhibits Open</i> | Exhibit Hall |
| 9:00 -10:30 pm | Exhibits Open | Exhibit Hall |
| Thursday, April 19 | | |
| 7:00 am-4:00 pm | Power Point Preview & Tech. Check | Small Room |
| 8:00 am-5:00 pm | Exhibits Open | Exhibit Hall |
| 8:00 am-5:00 pm | Registration Open | Convention Center |
| 9 am-12:00 Noon | Guest/Spouse Tours | Columbia |
| 7:00-8:30 am | ASB Past Presidents' Breakfast | Meeting Room |
| 8:30-10:00 am | Paper Presentations (50- | 9 Meeting Rooms |
| 8:30-10:00 am | Exhibitor's Workshop | Meeting Room |
| 9:00-12:00 noon | Symposium I | Meeting Room Exhibit Hall |
| 10:00-10:30 am 10:00- 12:00 noon | Break: Visit Exhibits & Posters | |
| 10:30-12:00 noon | Education Committee Workshop Paper Presentations | Meeting Room |
| 10:30-12:00 noon | Exhibitor's Workshop | 9 Meeting Rooms Meeting Room |
| 10.50-12.00 110011 | "Life in an Extreme Environment. <i>Hald</i> | - U |
| | NRC-1: A New Model Organism for the | |
| 8:00-9:00 am | ASB Posters I Setup | Exhibit Hall |
| 10:00-11:00 am | ASB Posters I Presentations | Exhibit Hall |
| | Presenters must be present | |
| 12:00 noon-1:30 pm | Lunch (Individuals & Organizations) | |
| 12:00 noon-1:30 pm | Committee on Human Diversity | Meeting Room |
| 1:00-5:00 pm | Luncheon and Mentoring Workshop Tri-Beta Field Trip to Riverbanks Zoo | |
| 1:30-3:00 pm | Paper Presentations | 9 Meeting Rooms |
| 1:30-3:00 pm | Exhibitor's Workshop "SQUID INK-UIRY: Inquiry-based Inve | Meeting Room ertebrate Anatomy |
| 2,00 2,20 | through Squid Dissection" | E.A. T. C. L. C. |
| 3:00-3:30 pm | Break: Visit Exhibits & Posters | Exhibit Hall |
| 3:30-5:30 pm | Paper Presentations | 9 Meeting Rooms |

| 3:30-5:30 pm | Exhibitor's Workshop "Classroom Wonders: Wisconsin Fa | Meeting Room |
|--|--|--|
| | C-FERN" | ot i famo ana |
| 2:00-5:00 pm | Symposium II | Meeting Room |
| 2:30-3:30 pm | SHC Executive Board Meeting | Meeting Room |
| 3:30-4:30 pm | The SHC Meeting | Meeting Room |
| 1:30-4:00 pm | ASB Posters I on Exhibit | Exhibit Hall |
| 4:00-5:00 pm | ASB Posters I Removed | Exhibit Hall |
| 5:30-7:00 pm | On your own in the Vista | EXHIBIT HAII |
| 6:00-11:00 pm | Thursday Night Social : | Strom Thurmond |
| σ.σσ 11.σσ μ | The Antepenultimate Party | Wellness Center |
| | (Shuttle Buses to/from ASB Hotels) | vvciiness senter |
| Friday, April 20 | (Gradue Bases to/Horri / CB Froteis) | |
| 7:00 am-4:00 pm | Power Point Preview and Tech. Che | eck Meeting Room |
| 8:00 am-1:00 pm | Exhibits Open | Exhibit Hall |
| 1:00-4:00 pm | Exhibitor Move-Out | Exhibit Hall |
| 9:00am-12:00 Noon | Guests Tour | Columbia |
| 7:00-8:30 am | SABS/BSA Breakfast | |
| 7:00-8:45 am | | Meeting Room |
| 9:00-10:00 am | βββ Poster Setup | Meeting Room |
| 10:00-11:30 am | βββ Business Meeting | Meeting Room |
| 8:30-10:00 am | βββ Poster Presentations | Meeting Room |
| | Paper Presentations | 9 Meeting Rooms |
| 8:30-10:00 am | Exhibitor's Workshop | Meeting Room |
| | Comparative Mammalian Organ Dis | |
| | | no" |
| 7:00 8:30 | Carolina's Perfect Solution Specime | |
| 7:00-8:30 am | ASB Posters II Setup | ns" Exhibit Hall |
| 7:00-8:30 am . 10:00-11:00 am | ASB Posters II Setup ASB Posters II Presentations | |
| 10:00-11:00 am | ASB Posters II Setup ASB Posters II Presentations Presenters must be present | Exhibit Hall Exhibit Hall |
| 10:00-11:00 am 10:00-10:30 am | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters | Exhibit Hall Exhibit Hall Exhibit Hall |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations | Exhibit Hall Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall Exhibit Hall |
| . 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm 4:00-5:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall |
| . 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm 4:00-5:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed Friday Night Social: | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall Exhibit Hall Convention Center |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm 4:00-5:00 pm 6:00-7:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed Friday Night Social: The Penultimate Party | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall Exhibit Hall Convention Center Ballroom |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm 4:00-5:00 pm 6:00-7:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed Friday Night Social: The Penultimate Party Awards Banquet: The Ultimate Party | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall Exhibit Hall Convention Center Ballroom |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm 4:00-5:00 pm 6:00-7:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed Friday Night Social: The Penultimate Party Awards Banquet: The Ultimate Party | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall Exhibit Hall Convention Center Ballroom Awards |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm 4:00-5:00 pm 6:00-7:00 pm 7:00-10:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed Friday Night Social: The Penultimate Party Awards Banquet: The Ultimate Party Presentation and Announcement of | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall Exhibit Hall Convention Center Ballroom Awards |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm 4:00-5:00 pm 6:00-7:00 pm 7:00-10:00 pm | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed Friday Night Social: The Penultimate Party Awards Banquet: The Ultimate Party Presentation and Announcement of | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall Exhibit Hall Convention Center Ballroom Awards t Meeting |
| 10:00-11:00 am 10:00-10:30 am 10:30-11:30 am 11:30 am-12:30 pm 12:30-2:00 pm 2:00-5:30 pm 2:00-5:00 pm 3:00-4:00 pm 4:00-5:00 pm 6:00-7:00 pm 7:00-10:00 pm Saturday, April 21 7:30-11:30 am | ASB Posters II Setup ASB Posters II Presentations Presenters must be present Break: Visit Exhibits & Posters ASB Business Meeting Paper Presentations Lunch (Individuals & Organizations) Paper Presentations Symposium III ASB Posters II on Exhibit ASB Posters II Removed Friday Night Social: The Penultimate Party Awards Banquet: The Ultimate Party Presentation and Announcement of ASB Executive Committee Breakfas Field Trips (Listed in this issue) | Exhibit Hall Exhibit Hall Exhibit Hall Ballroom 9 Meeting Rooms 9 Meeting Rooms Meeting Room Exhibit Hall Exhibit Hall Convention Center Ballroom Awards t Meeting |

PLENARY SPEAKER

PETER C. H. PRITCHARD

Peter C. H. Pritchard was born in England in 1943, and was raised in Northern Ireland. He relocated to Florida in 1965. He has a B.A. (with Honours) and an M.A. in Chemistry from Oxford University, and a Ph.D. in Zoology from the University of Florida, where he studied sea turtle biology with Dr. Archie Carr. After four years of work with the World Wildlife Fund, he became an officer of the Florida Audubon Society in 1973, where he held various positions including those of Assistant Executive Director, Senior Vice President and Acting President. Since 1998 he has been Director of the Chelonian Research Institute in Oviedo, Florida, and is an Adjunct Professor of Biology at Florida Atlantic University and at the University of Central Florida. Pritchard is married to the former Sibille Hart

of Georgetown, Guyana, and they have three sons— Sebastian, Dominic, and Cameron.

He is best known as an authority on the biology and conservation of turtles and tortoises. Both before after receiving and doctorate in 1969, he has undertaken extensive fieldwork with turtles on all continents and many remote islands, and he has established a permanent field station for turtle conservation in northwestern Guyana. **Three** species of turtle are named after him-a snake-necked turtle from New Guinea, a pond turtle from northern Burma and a giant fossil neck turtles side from Colombia. He has been recognized as a "Champion of the Wild" by the Discovery Television Channel and as a "Hero of



the Planet" by TIME Magazine. In 2001, he was declared "Floridian of the Year" by the Orlando Sentinel newspaper.

He has written a number of books. These include: Living Turtles of the World (1967); Marine Turtles of Micronesia (1977); Encyclopedia of Turtles (1979); Turtles of Venezuela (1984); The Alligator Snapping Turtle (1990; reprinted 2006); Saving What's Left (1994); Galapagos Tortoises: Nomenclatural and Survival Status (1996); The Pinta Tortoise: Globalization and the Extinction of Island Species (2005); and Tales from the Thé baïde (in press). His first children's book, Cleopatra the Turtle Girl, will be published by the Guyana Book Foundation in early 2007.

Travel to Columbia

Columbia is one of eleven cities in the United States through which pass three interstate highway, viz., I-77, I-20, and I-26. I-77 North connects with I-40 and I-81. I-20 West connects with I-85 in Atlanta. I-20 East connects with I-95 in Florence. I-26 West connects with I-385 to Greenville and continues to I-40 in Asheville. I-26 East connects with I-95 and continues to Charleston.

From Charlotte (Points North):

Take I -77 South to Columbia to Exit 18 onto SC 277. Follow Hwy 277 into the city where it becomes Bull Street and dead ends at Pendleton Street. Turn right on Pendleton, travel 6 blocks to Lincoln Street, turn left and then right into the Convention Center parking lot.

From Nashville/Knoxville (Points West):

Take I-40 East to I-26 East in Asheville. Follow I-26 East to Columbia where two left lanes enter the city as I-126. Stay in the right two lanes where I-126 becomes Elmwood Ave. Turn right on Assembly Street and travel 10 blocks (count on right side) to Pendleton Street. Turn right on Pendleton; go 2 blocks to Lincoln Street; turn left and then right into the Convention Center parking lot.

From Atlanta (Points West):

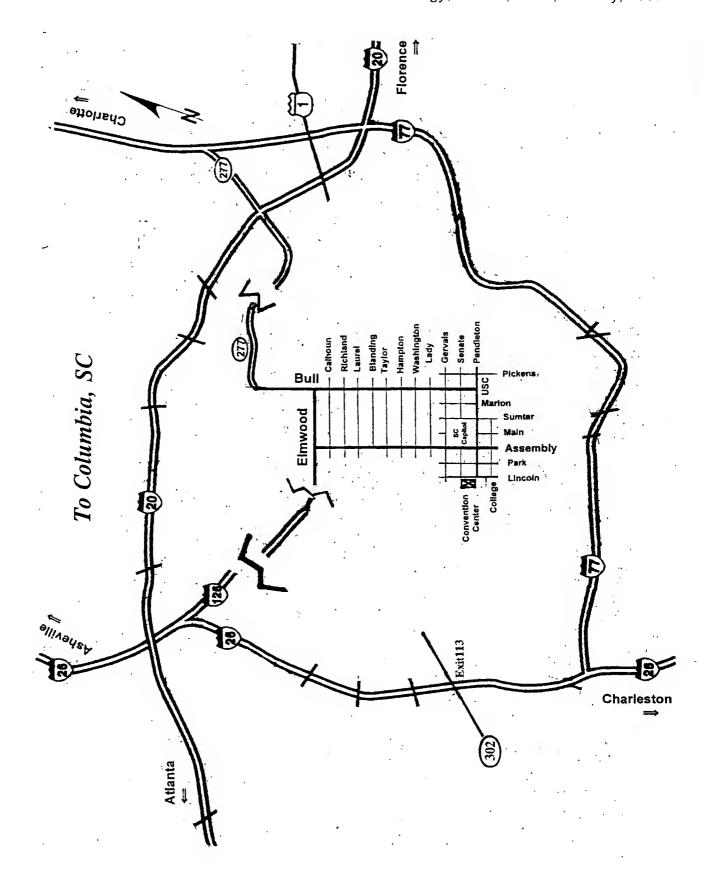
Take I-20 East to Columbia to Exit 64, I-26 East to enter the city (See "From Nashville/Knoxville" above).

From Charleston or I-95 (Points South):

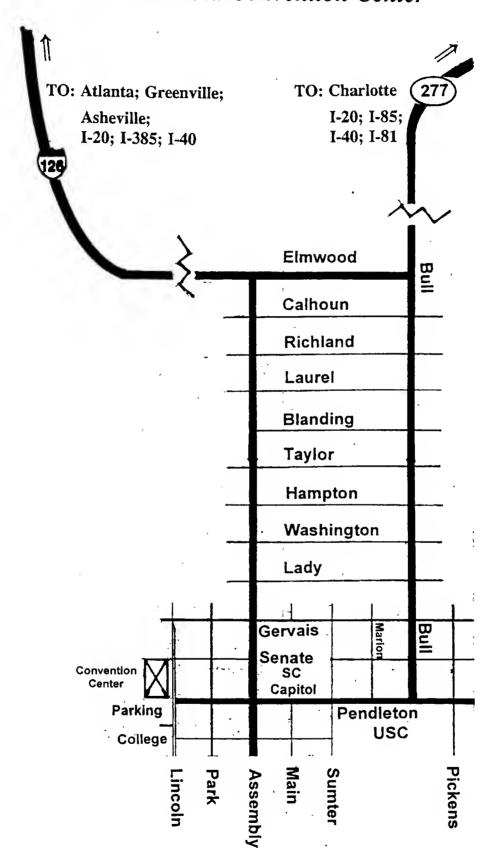
Take I-26 West to Exit 108, I-126 East to enter the city. (Follow "From Nashville/Knoxville" above). Alternative: From I-26 West, take Exit 113, Route 302 (Edmund Road) toward city; left on Route 321 and soon right on Knox Abbott Drive which across the river is Blossom Street. Turn left on Lincoln Street, pass College Street, and turn left into the Convention Center parking lot.

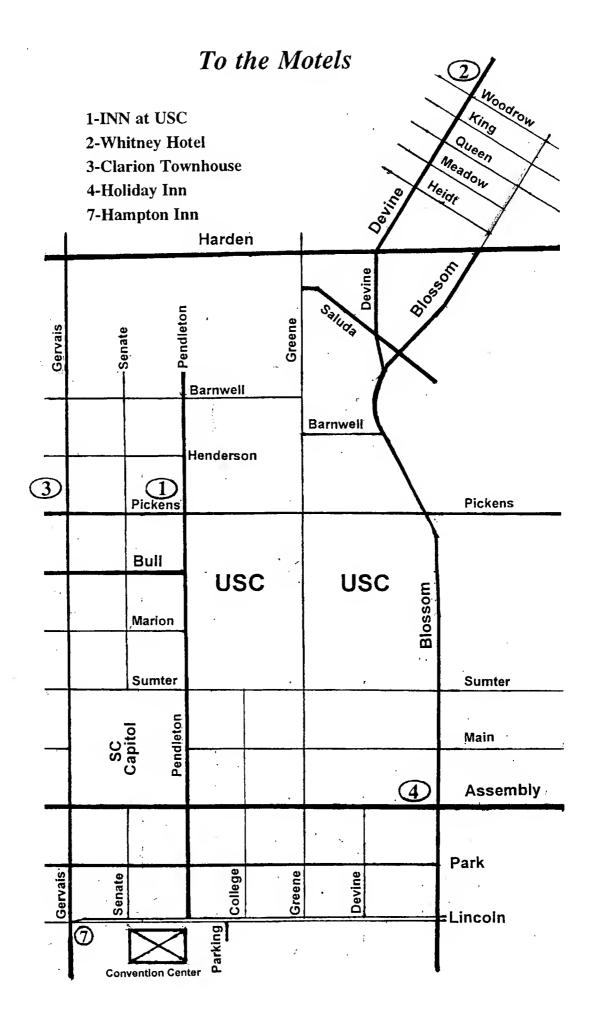
From Florence or I-95 (Points North):

Take I-20 West to Exit 73 onto SC 277. Follow 277 into the city (Follow "From Charlotte" above). •

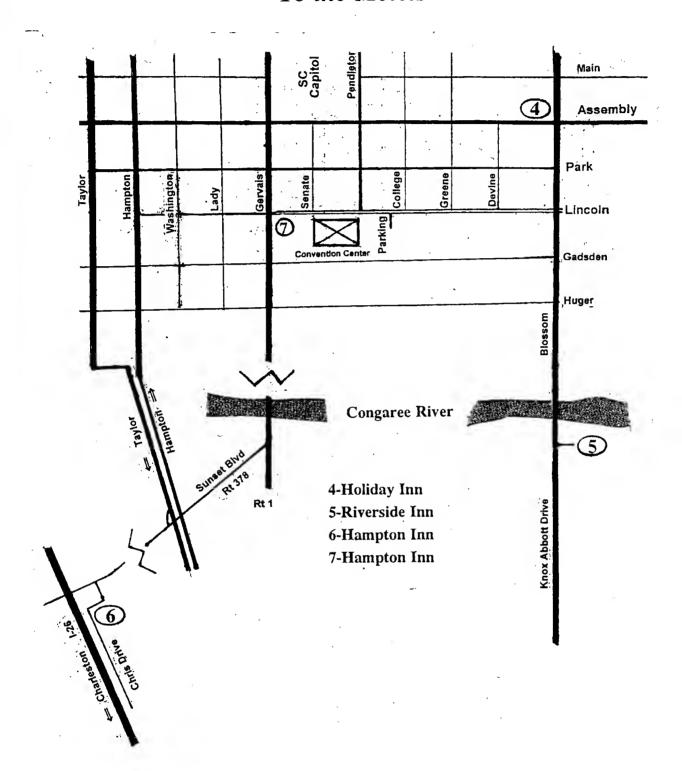


To Columbia Convention Center

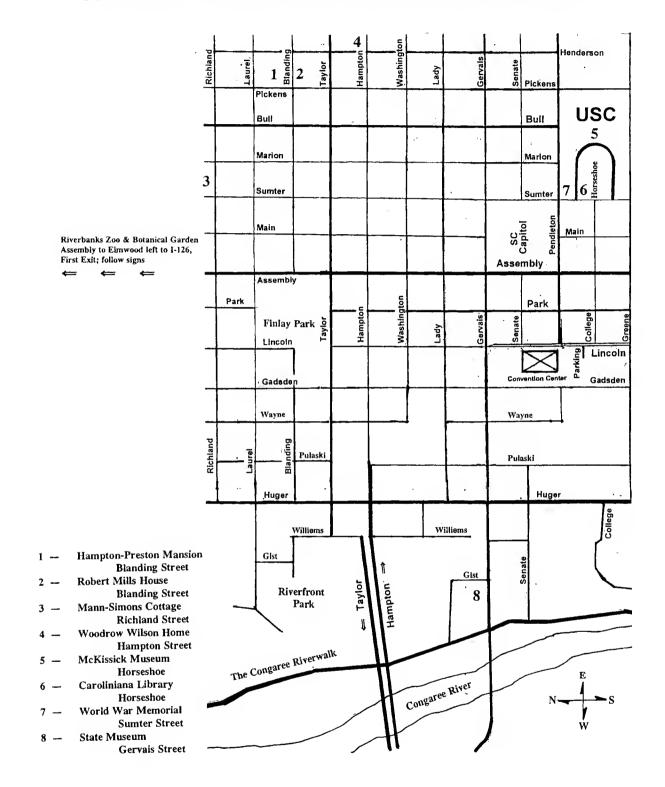




To the Motels



Columbia: Historical Sites and Memorable Sights



ASB 2007 FIELD TRIPS

For its geographic area, South Carolina is rich in natural habitats and species diversity, and thus presents many excellent opportunities for biological research. The western third of the Palmetto State comprises Blue Ridge and piedmont ecoregions. The lower two-thirds of the state is dominated by its coastal plain, and related fall-line sandhills. A series of field trips has been planned for the exploration of the costal plain and sandhills.

Trips are approximately a half day in length and will involve caravans. Car pooling, where possible, will be encouraged. All trips will begin from the Columbia Convention Center. "One way" participation, that is, without a return to Columbia, is OK. Lunch will be on your own; bring whatever food and water you will need.

The middle of April in South Carolina is a beautiful time, as spring literally erupts across the state. Nevertheless, we often have cool snaps and sudden rainy weather in the spring, and storms are possible. Participants are requested to dress appropriately (including selecting proper footwear), and to be aware that ALL the field trips involve potential wet or muddy places. Spring is not particular bad in the mosquito and yellow-fly department (that's during the summer!), but insect repellent may be useful. The best philosophy, of course, is to be a good boy scout or girl scout, and to BE PREPARED. Consider also that we are home to several trillion fire ant nests, which can make a field trip very unpleasant. For information, contact field trip coordinator John Nelson.

- 1. **Congaree Bluffs Heritage Preserve**, Calhoun County SC. 9:00am-1:00pm. Trip leader: Ann Darr, SCDNR. One of the newest members of South Carolina's heritage sites, situated on the south side of the Congaree River, featuring 200' riverine bluffs, and a spectacular view of the Congaree River floodplain.
- 2. **Flat Creek Heritage Preserve**, Lancaster County SC. 9:00am-1:00pm. Trip leader: Kathy Boyle, SCDNR. Long known as one of the best developed granitic flatrock ecosystems in the Southeast, featuring healthy populations of the endangered poolsprite (*Amphianthus pusillus*). Associated forests, underlain by a massive diabase dike, feature calciphilic vegetation.
- 3. **Congaree National Park**, Richland County. 9:00am-1:00pm. L. L. Gaddy, Terra incognita, Inc. A complex of various bottomland ecosystems, along with mesic bluff communities; the largest contiguous tract of virgin forest remaining in South Carolina, and home to a number of national champion trees. Nearly 800 species of vascular plants reside here.
- 4. **Stevens Creek Heritage Preserve**, McCormick County SC. 9:00am-1:00pm. Trip leader: Rudy Mancke, USC. One of the Southeast's most diverse botanical sites, featuring a large number of rare species and a rich spring floral display. This site is considered a relict pleistocene habitat, whose biological affinities are largely northern.

- 5. **Birding field trip**: Destination, time TBA. Trip leader: John Cely. Characteristic avian fauna of the SC midlands. Special attention will be paid to the many spring migrants of this area.
- 6. **Herpetological field trip**, Hampton and Jasper Counties SC, SCDNR properties. 9:00am-until? Trip leaders: Stephen Bennett, SCDNR, Julian Harrison, College of Charleston. Reptiles and amphibians, and their habitats, from a variety of low-country sites.
- 7. **Sandhill excursion**: Peachtree Rock Heritage Preserve, Shealy's Pond Heritage Preserve. 9:00-until? Trip leaders: Bert Pittman, SCDNR, Wayne Grooms. The first Nature Conservancy Preserve in SC, now a Heritage Preserve. Unusual geologic formations support a variety of habitats and rare species. You'll see the highest natural waterfall between Columbia and Charleston, and an excellent example of a blackwater sandhill stream, complete with an Atlantic white-cedar bog.

Thursday Education Workshop

The Education Committee will offer a workshop entitled, "Going to the next level: A session for undergraduate and graduate students planning to continue their education or enter a professional career"

Thursday Human Diversity Workshop

The Committee on Human Diversity will hold a luncheon and Mentoring Workshop. The workshop will include topics such as: How to Choose a Mentor; How to make the Most out of a Mentoring Relationship; and How to Become a Mentor. Following an opening presentation on each of these topics, participants will move into break-out groups for topic-based discussion

Saturday Curators Workshop

SERNEC (SouthEast Regional Network of Expertise and Collections) is a five year project funded by the National Science Foundation to develop a network of herbaria in the Southeast. This network is designed to encourage cooperation in databasing the region's collections by the year 2020, while at the same time developing herbaria as community centers for learning about plants.

The curators from the 150 herbaria in the Southeast will meet on Saturday after the ASB meeting for a workshop on "Research, Collaborations and Funding". A symposium will be conducted on Friday to "kick-off" that workshop, providing time for representatives to present the projects and ongoing efforts from each state.

Our networking efforts in the Southeast put us at the forefront of a national effort to database biological collections. The Saturday Curator's Workshop will help us determine how we can interact in novel ways to provide a model for other regions as they develop their networks. These interactions will cut across taxonomic

boundaries and across disciplines within biology, while developing new methods to get information to the diversity of users in the community.

SERNEC (see SERNEC.ORG) is funded by the National Science Foundation as a Research Coordination Network. Through this grant we have monies to offset the cost of travel to this meeting. If you need additional information about this Curator's Workshop please contact Zack Murrell at murrellze@appstate.edu.

Symposia

I. Ecological Impacts and Coastal Ecosystem Resiliency Following Hurricane Katrina.

In the wake of Hurricane Katrina, the University of South Carolina's Office for Research and Health Sciences awarded nearly \$400,000 in grants to fund 18 research projects on the environmental and societal impacts of the massive storm as part of the university's CRISIS (Coastal Resiliency Information Systems Initiative for the Southeast) initiative. The grants enabled USC researchers and their collaborators at universities in the Gulf Coast, including Louisiana State University, Tulane, the University of Southern Mississippi, and the University of South Alabama, to investigate the disaster, capture perishable data necessary to understand aspects of coastal resiliency, and examine the recovery of natural processes and ecosystems and the societal changes that occur with the relocation of residents and the rebuilding of communities. This symposium will include presentations from five of these projects that span a range of interests and topics, but all focus on the ecological effects of the hurricane and touch on the implications for ecosystem recovery

Introduction to Session: John Kupfer (10 minutes)

Speakers and Titles:

Assessing Regional Impacts at the Population-Genetic Level in Estuarine Animals Impacted by Hurricane Katrina. Joseph Quattro, Dept. of Biological Sciences and Marine Science Program.

Hurricane Katrina Impacts and Responses in a Pristine Coastal Salt Marsh Estuary. Sam Walker, Dwayne Porter and Madilyn Fletcher. Dept. of Environmental Health Sciences, Arnold School of Public Health; Marine Science Program; Dept. of Biological Sciences and School of the Environment.

Untreated Urban Effluent Effects on Phytoplankton Community Structure and Function in Lake Pontchartrain, Louisiana. James Pinckney, Meghan Jelloe, Michael Coggins and Danielle Johnson. Dept. of Biological Sciences and Marine Science Program.

Patterns and Controls of Forest Damage Following Hurricane Katrina in DeSoto National Forest, Mississippi. John Kupfer, Dept. of Geography, USC Hazards Vulnerability Research Institute.

Geospatial Integration of Biophysical and Social Indicators for Examining Community and Ecosystem Vulnerability and Resilience. Susan Cutter and Jerry Mitchell, Dept. of Geography, USC Hazards Vulnerability Research Institute.

Panel Discussion and Questions:

II. A Symposium in Honor of Albert E. Radford (1918-2006): Contributions to Southeastern botany, floristics, ecology, and conservation.

Subject areas:

- 1. Taxonomic work in the Southeastern US; naming of new taxa.
- 2. Biodiversity inventory and conservation in the Southeastern United States.
- 3. Ecosystematics / community diversity / soil and rock type control of vegetation.
- 4. Floristics / keys / ID aids for the Southeastern flora.
- 5. Southeastern Biogeography.

Introduction:

Alan S. Weakley (North Carolina Botanical Garden, University of North Carolina at Chapel Hill). "Contributions of Al Radford to Southeastern floristics and conservation"

Systematics:

Katherine Mathews (Western Carolina University). "Systematics and biogeography of Sabatia (Gentianaceae)"

L.L. 'Chick' Gaddy (terra incognita). "Homage to K. K. Mackenzie and Albert Radford: Why are there so many sedges?"

Jim Allison (Georgia Natural Heritage Program, retired). "New taxa in the *Hypericum denticulatum* complex, including *H. radfordiorum*"

Bruce Sorrie & Richard LeBlond (North Carolina Natural Heritage Program and UNC Herbarium). "Taxonomy of southeastern needle-leafed *Hypericum*"

Floristics:

Alan S. Weakley (North Carolina Botanical Garden, University of North Carolina at Chapel Hill). "A new regional flora for the Southeastern United States"

J. Christopher Ludwig (Virginia Division of Natural Heritage and Flora of Virginia Project). "A new flora for the Old Dominion: a progress report"

Bioinformatics and Biogeography:

Zack Murrell (Appalachian State University). "The role of cyberinfrastructure in conservation and biogeography in the Southeast"

Robert K. Peet and Alan S. Weakley (UNC Herbarium). "A new online tool for accessing distributional data for the Carolinas"

Donna, M.E. Ware (College of William and Marry) and Gary P. Fleming (Virginia Division of Natural Heritage). "Mountain plants found in coastal plain refugia in Virginia"

Inventory and Conservation:

Misty Franklin (North Carolina Natural Heritage Program). "The status of natural area inventory in North Carolina"

Patrick McMillan (Clemson University). "Al Radford's influence on natural area conservation in South Carolina"

III. Status of the herbarium cyberinfrastructure in the Southeast

SERNEC (Southeast Regional Network of Expertise and Collections) is a five year project funded by the National Science Foundation to develop a network of herbaria in the Southeast. This network is designed to encourage cooperation in databasing the collections by the year 2020, while at the same time developing herbaria as community centers for learning about plants. The curators from the 150 herbaria in the Southeast will meet on Saturday after the ASB meeting for a workshop on "Research, Collaborations and Funding". The symposium will be a "kick-off" for that workshop, providing time for representatives to present the projects and ongoing efforts from each state. This will allow others to see the novel projects being developed and will provide a foundation for discussions on Saturday.

Speakers:

Zack Murrell Introduction and update on SERNEC

Austin Mast Gulf Coast eFlora Project

Curtis Hansen Alabama Herbarium Network

Johnnie Gentry Arkansas Herbarium Network

Andrea Weeks Virginia Herbarium and Library Network

Gerald Long South Carolina Herbarium Consortium

Michelle Zjhra State of the Georgia Herbaria

Dayle Saar State of Kentucky Herbaria

Tom Sasek State of Louisiana Herbaria

Lucile McCook State of Mississippi Herbaria

Joey Shaw State of Tennessee Herbaria

TBA State of Florida Herbaria

Alexander Krings State of North Carolina Herbaria

Roland Roberts State of Maryland and Delaware Herbaria

TBA State of West Virginia Herbaria

Commercial Workshops

All commercial workshops will be presented by exhibitors for all registered attendees during the regular hours of the meeting. The fee for each workshop will be \$10 each. You may register to attend one or more workshop[s during the Annual meeting. Topics range from the non-formaldehyde preservative used in dissection to the latest electron microscopy instruments. Plan to attend one of this year's workshops and learn about the latest tips from experts.

Commercial Workshop Listings

Title: Inquiry-based Rat Dissection with Carolina's ™ Perfect Solution®

Date: Wed, 4/18/06 **Time:** 4pm-5:30pm

Location: Columbia Convention Center-Room:TBA

Experience superior quality with Carolina's[™] Perfect Solution®, a safe alternative to formaldehyde. This revolutionary, proprietary fixative is nontoxic, no formaldehyde odor, no special ventilation or disposal. Carolina's[™] Perfect Solution® specimens are the finest, safest Preserved specimens available. Carolina's[™] Perfect Solution® Rats are visibly better, unique and exclusive (not available elsewhere).

Title: <u>Life in an Extreme Environment. *Halobacterium* sp. NRC-1: A New Model Organism for the Laboratory</u>

Date: Thurs, 4/19/06 **Time:** 10:30pm-12 noon

Location: Columbia Convention Center-Room:TBA

Introducing the new model microbe, *Halobacterium* sp. NRC-1! A member of Archaea, the 3rd domain of life. *Halobacterium* is an extremophile because it requires an environment several times saltier than the ocean. While few other organisms can survive in such conditions, *Halobacterium* cannot survive outside them. This makes the microorganism ideal for teaching microbiology, genetics, bioinformatics and more.

Title: <u>SQUID INK-UIRY: Inquiry-based Invertebrate Anatomy through Squid Dissection</u>

Date: Thurs, 4/19/06 **Time:** 1:30pm-3:00pm

Location: Columbia Convention Center-Room:TBA

These beautiful, mysterious creatures fascinate students and teachers. Learn morphology and anatomy of the common squid, a representative mollusk, through hands-on, guided, basic dissection and detailed dissection of the organ systems. Large specimens provide a clear view of invertebrate anatomy. Much easier than other mollusks, such as clams.

Title: Classroom Wonders: Wisconsin Fast Plants® and C-FERN®

Date: Thurs, 4/19/06 **Time:** 3:30pm-5:30pm

Location: Columbia Convention Center-Room:TBA

Wisconsin Fast Plants® and C-FERN® allow you to cover abroad spectrum of biology with minimal equipment and space. No greenhouse is needed. Possible topics include plant life cycles, alteration of generations, genetics, plant physiology, environmental effects, genetic variation, population biology, evolution and more.

Title: Comparative Mammalian Organ Dissection with Carolina's™ Perfect

Solution® Specimens

Date: Friday, 4/20/06

Time: 8:30am-10:00am

Location: Columbia Convention Center-Room:TBA

Dissect a mammal brain, eye, heart, and kidney. Observe structure and explore physiological links between organ systems. Note the tissue types and compare blood flow and innervation within each specimen. Find differences in tissue type, epithelial lining, and blood supply. Identify structures representative of class Mammalia.

Silent Auction

Once again, ASB will have a Silent Auction in the Exhibit Hall. 100% of all proceeds will benefit student travel to the Annual Meeting. Last year's Silent Auction was a big success. Let's plan on another successful event to assist students with their travel expenses to the meeting in Columbia

Social Events

Wednesday night mixer: The event will be in the exhibitor hall immediately following the Plenary Session. Sign up for this FREE event when you register for the meeting. Kick off our Annual Meeting with a Big Bang! Heavy Hors d'oeuvres and a cash bar will be available.

Thursday night social: ASB has a historic reputation for hosting an exciting and fun-filled Thursday Night Social. And this year is no different! We are bringing the Beach to Columbia!!! This year's event will be held at the brand new Strom Thurmond Wellness & Fitness Center on the beautiful campus of the University of South Carolina. This world-class facility has over 192,000 square feet of indoor space, outdoor pool and sand volleyball courts.

Since 1971, The Second Nature Band has been a regional favorite for Country Clubs, College Campuses, Reunions and Convention Groups. They will provide an evening of the most popular Beach & Dance Music and are a top choice for Festivals and Beach Shows. The band's repertoire contains exceptional variety to excite any gathering. Bring your sliding dancing shoes......you will want to learn "The Shag" that was invented in South

Carolina. The outdoor pool will be open (life-guards will be on duty) and sand volleyball courts will also available for everyone to enjoy! Bring your swimsuit, your appetite, your dancing shoes and yourself to this sure-to-be-fun night of enjoyment! ASB will provide continuous transportation to/from the event-no driving required!



Outdoor Pool Area
Strom Thurmond Wellness & Fitness Center

Friday night Awards Banquet: This year's event will be a change from the past in many ways. Students will enjoy a drastically reduced price of \$15 per person. This is a 40% reduction from last year's ticket price. Vegetarian meals will be available upon request. Following dinner, award presentations will be made. The Past President's speech will NOT be presented in Columbia. Other entertainment will be provided for your enjoyment. (A reminder: those competing for awards must be present at the banquet in order to receive the award).

Activities for Guests

There are a plethora of interesting places to visit not too distant from the Columbia Convention Center. The short list includes: Riverbanks Zoo and Botanical Garden; State Museum, Confederate Relic Room and Museum; McKissick Museum and USC Visitor Center; Columbia Riverfront Park and Historic Canal; and the Caroliniana Library, the first free-standing college library in the United States. Among many other attractions are several homes open to the public: Hampton-Preston Mansion and Gardens, Built in 1818, this restored antebellum mansion is furnished with Hampton and Preston family pieces; Mann-Simons Cottage, Celia Mann, an enslaved Charleston midwife who acquired her freedom and walked to Columbia, lived here from the 1840s until 1867; Robert Mills House & Park, This restored mansion was built in 1823 and designed by South Carolina's most famous architect, Robert Mills; and the Woodrow Wilson Family Home, Woodrow Wilson, the nation's 28th president, spent four years of his youth in Columbia. He and his family lived in this home built by his parents in 1872.cs

Registration Information

We encourage everyone to register early and save money. ASB offers 3 options for registration: 1) On-line @ www.asb.appstate.edu, 2) US Mail sent to Leads, Etc and 3) Fax directly to Leads, Etc. Details of the options follow the registration forms below. Registration forms are also available on-line.

Association of Southeastern Biologists April 18-21, 2007 Columbia, South Carolina

For Assistance with Registration: Please contact Leads, Etc 877/898-1155

Attendee Registration (Pre-Registration Deadline is 3/15/07)

| ~Institu | Name tion/Organizationss | | ne |
|-----------|--------------------------------------|----------------|------------------------------|
| *City | | *State *Fax | *Postal code Country |
| | il Address | | |
| *Indica | | must provide a | n e-mail address in order to |
| | Faculty Graduate Undergraduate Other | | |
| Affiliate | e:ASBESABBBSA | | |
| | Pre | -Registration | Late Registration |
| 0 | ASB Regular Member | \$135.00 | \$180.00 |
| 0 | ASB Student Member | | \$90.00 |
| 0 | ASB Non-Member | \$160.00 | \$195.00 |
| | ASB Non-Member Student | | \$125.00 |

Note: Membership must be up-to-date in order to receive the member rate. Please contact Tim Atkinson, ASB Treasurer, via telephone, 336/538-6224 or e-mail: Tim.Atkinson@carolina.com if you have questions regarding your membership only!

Social Events (Please check <u>all</u> events you plan to attend)

| | dnesday evening Wine and Cheese, Pos h bar social with live entertainment | • |
|-----|--|----------------------------------|
| | Regular Thursday night "A Night of Be | |
| • | Trogular Trialoday Tight 71711ght 07 D0 | tickets x \$35.00 = \$ |
| 0 | Student Thursday night "A Night of Be | |
| | | tickets x \$30.00 = \$ |
| 0 | Regular Friday evening ASB Banquet | tickets x \$35.00 = \$ |
| 0 | Student Friday evening ASB Banquet | tickets x \$15.00 = \$ |
| 0 | Thursday morning Past President's Brea | akfast tickets x \$15.00 = \$ |
| 0 | SWS Thursday Luncheon | tickets x \$15.00 = \$ |
| 0 | ESA/SE Chapter Friday Luncheon | |
| _ | | |
| 0 | SABS/BSA Friday Breakfast | tickets x \$13.50 = \$ |
| A | dditional Events (Please check <u>all</u> e | vents you plan to attend) |
| 0 | Committee for Human Diversity-Thursda (Workshop Limited to 50 participants) | • |
| 0 | Education Committee -Thursday Works (Workshop Limited to 50 participants) | |
| 0 | SHC and SERNEC Saturday Workshop (Workshop Limited to 70 participants) | |
| Fie | e ld Trips (Please check <u>all</u> events you | plan to attend) |
| 0 | Congaree Bluffs Heritage Preserve | tickets x \$10.00 = \$ |
| 0 | Flat Creek Heritage Preserve | tickets x \$10.00 = \$ |
| 0 | Congaree National Park | tickets x \$10.00 = \$ |
| 0 | Stevens Creek Heritage Preserve | tickets x \$10.00 = \$ |
| 0 | Birding In South Carolina | tickets x \$10.00 = \$ |
| 0 | Herpetology In South Carolina | tickets x \$10.00 = \$ |
| 0 | Sandhill Excursion-Gamecock Style | tickets x \$10.00 = \$ |
| 0 | Tri- Beta Field Trip-Riverbanks Zoo (Limited to 50 participants) | tickets x \$14.00 = \$ |

Commercial Workshops Commercial workshops will be presented by exhibitors for registered attendees. The fee for each workshop is \$10. You may register for one or more workshops. Topics range from the non-formaldehyde preservative used in dissection to the latest electron microscopy instruments. Plan to attend and learn about the latest tips from the experts. All workshops will be posted on line 15 December 06.

| Yes I plan to attend a | workshop during th | the meetingtickets x \$10.00 = \$ |
|---------------------------|---|---|
| TOTAL | | \$ |
| For | Assistance with | nformation: (3 Options) th Registration: , Etc 877/898-1155 |
| - | sb.appstate.edu fo nail address in ord | ard for Secure online credit card paymer order to receive a confirmation of you |
| the ASB Conference Reg | tration form along gistration Manage | nrd ng with your credit card information ger at Leads, Etc: Fax 508/668-266 order to receive a confirmation of you |
| Mail your completed regis | payable to: The As stration form and | Association of Southeastern Biologist d your check to ASB, c/o Leads, Et dence Parkway Highway, Walpole, M Discover |
| CC# | Exp <u></u> /_ | <i>J</i> |
| Name As It Appears On (| Card | |
| Credit Card Billing Addre | ess | |
| *Address | | *First Name*Postal Code |
| *City | *State | *Postal Code |

*Phone _____

Cancellation policy: A full refund will be issued (less a \$25 handling fee) if ASB is notified in writing at the above address on/or before Feb 28th, 2007. After Feb 28th, 2007, no refund will be honored. Notifications must be postmarked by Feb 28th, 2007 in order to receive a refund.

| Office Use Only | | • | |
|-------------------------|---------|----------|----------|
| Paid with check # | on Date | Rec'd | by: |
| Paid with credit card # | | on Date: | Rec'd by |

Conference Badges

You will receive your meeting badges when you arrive in Columbia. Simply proceed to the Registration Area in the Columbia Convention Center to receive your badge. Family members of meeting participants should ask for guest conference badges at the registration desk. YOU MUST WEAR YOUR BADGE TO ALL FUNCTIONS, INCLUDING SOCIAL EVENTS!

Hotel Information

ASB has secured the following hotels at a discounted rate for exhibitors and attendees. Please remember to ask for the special ASB discounted rate when making reservations. The following hotels are providing additional services to accommodate ASB. Please make your reservations soon. The Inn at USC is our Headquarters Hotel has been secured for Exhibitors and Regular Members. The Riverside Inn and the Holiday Inn City Centre has been designated for student housing. Please make your reservations as soon as possible. Please visit their web sites for directions to their property. THE LAST DAY TO RESERVE A ROOM AT THE DISCOUNTED RATE IS 3/01/07.

2007 ASB Group Discount Hotels

| <u>Hotel</u> | Rates & Rating | Notes of Interest |
|--|------------------------------|--|
| Headquarters Hotel The Inn at USC 1619 Pendleton Street Columbia, SC 29201 803/779-7779 www.innatuse.com | S/D/T/Q*: \$116.10 5 Star | Made to order breakfast included. At least one occupant must be 21 or older. University Affiliated. 7 Blocks to Convention Center. Very nice property. |
| The Clarion 1615 Gervais Street Columbia, SC 29201 803/771-8711 www.clariontownhouse.com | S/D/T/Q: \$85.95 4 Star | Very Nice Restaurant 8 Blocks to Convention Center |

803/791-8940

Hampton InnWest Columbia/I-26
1094 Chris Drive
Columbia, SC 29201

S/D/T/Q: \$89.00
4 Star
breakfast included.
4.6 miles to Convention Center.

www.hampton-inn.com/hi/columbia-airport

The Whitney 1 BRS**: \$109.00 Very spacious, converted 700 Woodrow Street 2 BRS: \$129.00 condos. Columbia, SC 29205 4 Star Continental breakfast. 803/791-8940 Best value. www.whitneyhotel.com 21 Blocks to Convention Center. Student Housing S/D: \$57.00 1/2 Block from Riverwalk Riverside Inn T/Q: \$67.00 1.2 miles to Convention Center 111 Knox Abbott Drive 2 Star Cayce, SC 29033 803/939-4688

Student Housing S/D: \$67.00
Holiday Inn-City Centre 3 Star
630 Assembly Street
803/799-7800
Columbia, SC 29201
www.holidayinnatusc.com

www.riversideinncolumbia.com

Continental Breakfast.
Convenient to all functions.
5 Blocks to Convention Center

Hampton Inn- S/D: \$149.00 Extended continental breakfast included. Does not provide ASB Group Rate. Convenient to the Vista and Nightlife. Adjacent to Convention Center.

^{*} Single, Double, Triple, Quad. ** Bedroom Suite

Local Committee Assignments For The 68th Annual Meeting University of South Carolina Columbia, South Carolina

| Local Arrangements Chair: | John Herr herr@biol.sc.edu | (803) 777-8110 |
|------------------------------------|--|----------------|
| Program Committee: | David Lincoln | (803) 777-7306 |
| | lincoln@biol.sc.edu Rob Raguso raguso@biol.sc.edu | (803) 777-7074 |
| Commercial Exhibits and Workshops: | Dick Zingmark and MC* zingmark@biol.sc.edu | (803) 777-4873 |
| and Workshops. | Jerry Hilbish hilbish@biol.sc.edu | (803) 777-6629 |
| Field Trips: | John Nelson nelson@biol.sc.edu | (803) 777-8196 |
| Social Events: | David Rembert and MC* rembert@biol.sc.edu | (803) 777-0096 |
| Transportation/Parking: | Robert Feller feller@biol.sc.edu | (803) 777-3937 |
| On-Site Registration: | Gerald Cowley | (803) 772-0539 |
| Volunteer Coordinator: | Dick Vogt vogt@biol.sc.edu | (803) 777-8101 |
| Tri-Beta Coordinators: | David Reisman reisman@biol.sc.edu | (803) 777-8108 |
| | Loran Knapp knapp@biol.sc.edu | (803) 777-2557 |
| Audiovisual Coordinator: | Clint Cook and MC* cook@biol.sc.edu | (803) 777-3975 |
| Promotions: | Tim Mousseau and MC* | (803) 777-8047 |
| | mousseau@biol.sc.edu Richard Showman showman@biol.sc.edu | (803) 777-2457 |
| Hotel Accommodations: | Scott Jewell (the MC)* | |
| *Meeting Coordinator (MC): | Scott Jewell a2zconvention@yahoo.com | (336) 421-0034 |

AFFILIATE SOCIETIES MEETING WITH ASB APRIL 18-21, 2007

The following affiliate societies, except the SE Division of ASIH, Southeastern Fishes Council, Southeastern Microscopy Society, and Southeastern Society of Parasitologists, will be in attendance at the 2007 Annual Meeting. We anticipate an excellent diversity of paper and poster presentations. The societies and their contacts are listed below.

American Society of Ichthyologists and Herpetologists Southeastern Division

Dr. Gregory L. Fulling Senior Fisheries Biologist/ Geo-Marine, Inc. 550 East 15th Street Plano, TX 75074 (972) 423-5480; Fax: (972) 422-2736 e-mail: gfulling@geo-marine.com

Beta Beta Beta Southeastern District I

Dr. Virginia Martin Queens College of Charlotte 1900 Selwyn Avenue Charlotte, NC 28274 (704) 337-2261 e-mail: martinv@rex.queens.edu

Beta Beta Beta Southeastern District II

Dr. Donald H. Roush Dept. of Biology, Box 5181 University of North Alabama Florence, AL 35632-0001 (256) 765-4435 e-mail: dhroush@una.edu

Botanical Society of America Southeastern Division

Dr. Lytton John Musselman
Mary Payne Hogan Professor of
Botany and Chair
Department of Biological Sciences
110 Mills Godwin Building/45th St
Old Dominion University
Norfolk, VA 23529-0266
(757) 683 3595; Fax: (757) 683 5283
e-mail: lmusselm@odu.edu
http://web.odu.edu/lmusselman

Ecological Society of America Southeastern Chapter

Dr. Frank S. Gilliam
Department of Biological Sciences
Marshall University
Huntington, WV 25755-2510
Phone: (304) 696-3636
FAX: (304) 696-3243
E-mail: gilliam@marshall.edu

Society of Herbarium Curators

Dr. Zack Murrell
Department of Biology
Appalachian State University
Boone, NC 28608
(828) 262-2674 Fax:
e-mail: murrellze@appstate.edu

Society of Wetland Scientists South Atlantic Chapter

Gregory B. Noe U.S. Geological Survey 430 National Center Reston, VA 20192 (703) 648-5826; Fax: (703) 648-5484 e-mail: gnoe@usas.gov

Southeastern Fishes Council

Dr. Noel M. Burkhead USGS/FISC Geological Survey Center for Aquatic Resource Studies 7920 NW 71st Street Gainesville, FL 32653 (352) 378-8181; Fax: (352) 378-4956 e-mail: noel_burkhead@usga.gov

Southeastern Microscopy Society

Dr. Judy King, President, SEMS
Department of Pathology
University of South Alabama
2451 Fillingim Street

Mobile, AL 3617-2293

(251) 471-7779; Fax: (251) 470-5817

e-mail: jking@usouthal.edu

Southeastern Society of Parasitologists

Dr. Charles Faulkner Dept. of Comparative Medicine College of Veterinary Medicine University of Tennessee 2407 River Drive Knoxville, TN 37996-4543

(865) 974-5718; Fax: (865) 974-6232

e-mail: ctfaulkner@utk.edu

Southern Appalachian Botanical Society

Dr. Howard Neufeld Department of Biology Appalachian State University Boone, NC 28608 (828) 262-2683; Fax: 828-262-2127 e-mail: neufeldhs@appstate.edu

OB

ALL TAXA BIODIVERSITY INVENTORY (ATBI) GATLINBURG, TENNESSEE

ATBI is an organization devoted to surveying all life in the Great Smoky Mountains National Park.

More information about the ATBI and Discovery Life in America (DLIA) may be obtained from the Administrative Officer, Jeanie Hilten, by e-mail jeanie@dlia.org. The website is http://www.discoverlifeinamerica.org or at http://www.dlia.org. The mailing address is Discover Life in America, 1314 Cherokee Orchard Road, Gatlinburg, TN 37738. The telephone number is (865) 430-4752.

SOUTHERN APPALACHIAN FOREST COALITION (SAFC) ASHEVILLE, NORTH CAROLINA

As stated in their newsletter *Across Our Mountains*, SAFC is an organization dedicated to "working together to protect and restore southern Appalachian forests."

More information about SAFC may be obtained from their web site at http://www.safc.org, and by e-mail at safc@safc.org. The mailing address is Southern Appalachian Forest Coalition, 46 Haywood Street, Suite 323, Asheville, North Carolina 28801-2838. The telephone number is (828) 252-9223.

SPECIAL REMINDERS FROM THE PRINT EDITOR

ASB BANQUET ATTENDANCE

Please keep in mind that recipients of ASB awards must be present at the annual ASB banquet to receive the award. Therefore, all applicants for ASB awards must attend the banquet to insure the presence of the winners.

EXTRA ABSTRACT SUBMISSION

Besides sending abstracts of papers and posters to the Program Committee by December 1, 2006, anyone wishing to be considered for an award must send an abstract to the respective award committee chairperson in order to be considered. Checking the box on the registration form for the award is not enough. An abstract must be sent to the chairperson by January 20, 2007.

INSTRUCTIONS FOR SUBMITTING ORAL PRESENTATIONS

All oral presentations will be done using Microsoft PowerPoint only. Presenters should bring a backup copy on a CD disk or flash memory drive.

FINAL SUBMISSION OF CD

Complete and final presentations must be submitted on CD to the audiovisual coordinator to be received by April 11. The first author's name and truncated title should be written on the upper surface of the CD using an indelible marker.

Submit the CD to be received by the April 11 deadline to: ATTN: ASB 2007 Annual Meeting, c/o Mr. Clint Cook, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208.



68th Annual ASB Meeting Invitation to Exhibit and Present Workshops, Industry Partners & Advertising: Columbia, South Carolina April 18-21, 2007

This four-day event brings together approximately 800 biologists from across the southeastern United States. The meeting features a distinguished plenary speaker, special symposia, field trips, oral and poster presentations, workshops, networking and social events, and more.

The Annual Meeting provides you with the exclusive opportunity to showcase your products and/or services to this large and important audience of faculty, students, researchers, conservation workers, military and government personnel, and business professionals with a common interest in biological issues. Interests are diverse, but range from genetics and molecular biology, to physiology and population biology, to community and ecosystem ecology.

About ASB

The Association of Southeastern Biologists (ASB) was established in 1937 by biologists concerned with the quality of biological research in the southeastern United States. Today, ASB is the largest regional biology association in the country, and is committed to the advancement of biology as a science by the promotion of science education, research, and the application of scientific knowledge to human problems.

2007 Exhibitor Benefits

ASB is committed to maximizing your exposure and has scheduled a number of special events in the Exhibitor Showcase. The ASB Annual Conference allows for exposure to over 800 attendees dedicated to the advancement of biology

~Poster Sessions

Research posters will be displayed in the Exhibit Hall throughout the conference. ASB poster sessions are heavily attended. Exhibitors receive added exposure from this well attended event throughout the conference

~Exhibitor Showcase Welcome Reception

Immediately following the opening plenary speaker, a welcome reception will be held in the Exhibit Hall. Exclusive time for Exhibitors and attendees.

~Posters & Pastries

Attendees will view posters while enjoying AM & PM coffee breaks in the Exhibit Hall on Fri & Sat. Refreshment area is located in the back of the Exhibit Hall for maximum traffic flow.

~Commercial Workshops

Exhibitors may target attendees who participate in a 50-minute commercial workshop presented by the exhibitor at no additional charge.

~Signage

Special Exhibit Hall signage recognizing exhibitor participation.

~Networking at Social Events

Wed Night Welcome Reception, Thurs Night Social, Fri Night Banquet. Take advantage of getting to know attendees during these informal marketing events.

~Year-Round Advertising & Marketing Opportunities

ASB provides a hot link to your company for each qualifying Exhibitor. The link will remain on the ASB web site throughout the year for your convenience.

0

Explanation of Exhibiting at the Annual Association of Southeastern Biologists Columbia, South Carolina

3 Options

Option A:

Regular Exhibitor (Located In the Exhibit Hall)

Exhibitor Package: Each \$1,000 booth consists of (1) 10' x 10' booth, 8' back drape, 3' side drapes, (1) 8' X 24" white covered table with teal skirting, 2 folding chairs and 1 wastebasket, security services, hot link from ASB Web Site, 2 tickets to Thurs Night Social-"A Night of Beach", AM & PM breaks, Exhibitor Pizza Party during installation, exhibit hall signage, booth identification sign, recognition announcements and one 50-minute commercial workshop with full payment of booth, 2 complimentary badges for employees only (additional badges are \$130/person), 25 word description will appear in the final show program.

Option B:

Table Top Exhibit (Located Outside the Exhibit Hall in the Pre-Function Area)

Each \$300 table top booth consists of one 6' X 24" white covered draped table, 1 folding chair,1 ticket to Thurs Night Social-"A Night of Beach", AM & PM breaks, Exhibitor Pizza Party during installation, exhibit hall signage, 1 complimentary badges for employee only (additional badges are \$130/person), 25 word description will appear in the final show program. Backdrops are not allowed in this area.

Option C:

Publishers Book Exhibit (\$150 per title)

Attention Publishers & Authors!!! Can't make it to the meeting this year? No problem...... Each title is displayed in the Exhibit Hall in the ASB Publishers Book Exhibit Booth. Provide one copy of your publication and up to 500 copies of your accompanying literature. ASB will provide one 8" X 10" table top sign to announce your publication and display all 3 throughout the entire convention. (Your publication will not be returned)

Exhibit Hall Hours

Wednesday, April 18

9am – 4pm: Exhibitor Move-In

12noon – 2pm: Exhibitor Pizza Party

7:30pm – 9 pm: ASB Welcome Reception, Exhibits Open

Thursday, April 19

8am – 4:30pm: Exhibits Open

Friday, April 20

10am – 1pm: Exhibits Open

1pm – 4pm: Exhibitor Move-Out



Advertising with the Association of Southeastern Biologists

Reach Your Target Audience and Promote Your Products and Services Throughout the Year!! Advertise in *Southeastern Biology*.

Advertise in Southeastern Biology and reach over 1,500 members from 40 states and 13 countries. ASB publishes 4 issues of Southeastern Biology per year and an On-Site Program for the Annual Meeting. Choose one or both opportunities to increase your marketing exposure. Promote your products and services throughout the year

| 1/2 | Page 1½" X 1" Page 3" X 2" II Page 7½" X 4 ¾" |
|---------|--|
| | Yes I would like an AD in all 4, 2007 issues of Southeastern Biology (circle choice) |
| | 1/4 page = \$200, 1/2 page = \$325, full page = \$425 |
| | AD in Final On-Site Program (circle choice) |
| | 1/4 page = \$175, 1/2 page = \$225, full page = \$275 |
| | All ads are black and white |
| | |
| Signatu | ure Date phone |
| Title | e-mail |

Return Form with Check or Credit Card Information to: Scott Jewell, ASB Meeting Planner, PO Box 1088, Mebane, NC 27302; 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax. A2Zconvention@yahoo.com.



Silent Auction

| (100% of all proceeds to benefit student travel.) Partial List of Items Donated at the 2006 Annual Meeting in Gatlinburg Dissection Set | Yes, I would like to contribute to travel to the Annual Meeting. | the Silent Auction to he | lp with student |
|---|--|---|------------------|
| Dissection Set Corporate Gift Certificates Frog Model Dinner for Two Books Charts Wine Gift Basket Educational Charts Microscope Description of Item(s) to be donated ——————————————————————————————————— | (100% of all proceeds to benefi | t student travel.) | |
| Frog Model Dinner for Two Two Nights Hotel Accommodations Books Charts Wine Gift Basket Educational Charts Microscope Description of Item(s) to be donated ——————————————————————————————————— | Partial List of Items Donated at the 200 | 6 Annual Meeting in Gatl | inburg |
| Please check appropriate option: Please contact me at the convention to pick-up donation I will mail donation to Scott Jewell, ASB Meeting Planner before March 15, 2007. | Frog Model Two Nights Hotel Accommodations Charts | Dinner for Two Books Wine Gift Basket | tes |
| Please contact me at the convention to pick-up donation I will mail donation to Scott Jewell, ASB Meeting Planner before March 15, 2007. | Description of Item(s) to be donated | | |
| Please contact me at the convention to pick-up donation I will mail donation to Scott Jewell, ASB Meeting Planner before March 15, 2007. | | | |
| Please contact me at the convention to pick-up donation I will mail donation to Scott Jewell, ASB Meeting Planner before March 15, 2007. | | | |
| Please contact me at the convention to pick-up donation I will mail donation to Scott Jewell, ASB Meeting Planner before March 15, 2007. | | | |
| Please contact me at the convention to pick-up donation I will mail donation to Scott Jewell, ASB Meeting Planner before March 15, 2007. | | | |
| I will mail donation to Scott Jewell, ASB Meeting Planner before March 15, 2007. | Please check appropriate option: | | |
| 2007. | Please contact me at the convent | ion to pick-up donation | |
| Signature Date phone | | l, ASB Meeting Planner t | pefore March 15, |
| | Signature | Date | phone |
| Title e-mail | | e-mail | • |

Return form by **March 15, 2007** to: Scott Jewell, ASB Meeting Planner, PO Box 1088, Mebane, NC 27302; A2Zconvention@yahoo.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.



Exhibitor Registration Form

2007 Association of Southeastern Biologists April 18-21, 2007, Columbia, South Carolina Columbia Convention Center

Exhibitor Package: Each \$1,000 booth consists of (1) 10' x 10' booth, 8' teal back drape, 3' side drapes, (1) 8' X 24" white covered table with teal skirting, 2 folding chairs and 1 wastebasket, security services, hot link from ASB Web Site, 2 Tickets to Thurs Night Social--"A Night of Beach", AM & PM breaks, Exhibitor Pizza Party during installation, exhibit hall signage, booth identification sign, recognition announcements and one 50-minute commercial workshop with full payment of booth, 2 complimentary badges for employees only (additional badges are \$130/person), 25 word description will appear in the final show program. (The exhibit hall is **NOT** carpeted.)

| | Organization | | | |
|-----------------------|---|----------------------|--|--|
| (Pleas | se list company name as you wish it to appear on | printed materials) | | |
| Representative: Email | | | | |
| Address: | | | | |
| Contact A | ddress: | | | |
| Telephone | e:Fax: | | | |
| Web Site: | (Hot Link from ASB Web Site) | | | |
| 25-Word | Description: | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| (Desc | ription will be appear in Final Show Program of S | outheastern Biology) | | |
| | | | | |
| Qty | Item | Amount | | |
| | Patron Member Booth | included | | |
| | 1 st Booth | \$1,000 | | |
| | Each Additional Booth | \$500 | | |
| | Pre-Function Area Table Top Display | \$300 | | |
| | (No backdrop Allowed) | ΨΟΟΟ | | |
| | Publishers Book Exhibit | \$150/title | | |
| | | <u> </u> | | |
| | Flectrical Service Per Booth | \$70 | | |

| 38 | SE Biology | y, Vol. 54, No. 1, January, 2007 |
|---|--|---|
| A B Ir | es I wish to present a workshop additional Badges (2 included w/boo sanquet Tickets (Fri PM) aternet Access shone Line Please see Show Forms for additions | \$35/person \$300/day \$100/day |
| | Total Amount Enclosed | \$ |
| Requested Booth choice | Number (see Floor plan): 1st choice | e 2nd choice 3rd |
| osses, damages equipment and of facilities and shal and employees a claims. Upon accept form becomes the Exhibitor's will be | Clause: The Exhibitor assumes all read claims arising out of injury other property brought upon the publication of an arising out of injury other property brought upon the publication of the ASB organization from ance by ASB, this signed applicate contract for booth rental for the 200 anotified of their acceptance by letter of the organization of the sound of the sou | to the exhibitor's display, remises of the convention ssociation agents, servants any losses, damages and ion and Exhibitor Contract O6 ASB Annual Convention. er no later than 31 Jan. 07. |
| Signature | | Date |
| Title | e-ma | il |
| | Check or Credit Card Information by | |

Jewell, ASB Meeting Planner, PO Box 1088, Mebane, NC 27302; 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax. <u>A2Zconvention@yahoo.com</u>,

Early Bird Discount: \$100 off the \$1000 booth, if payment and application received prior to January 31, 2007.



Exhibitor Commercial Workshop Form

2007 Association of Southeastern Biologists April 18-21, 2007 Columbia, South Carolina Columbia Convention Center

<u>Workshop Description</u>: All Commercial Workshops will be conducted during the meeting on a first-come first-served basis. Classroom style seating will be provided at no additional charge to the presenter. Each classroom will be set for a minimum of 50 participants. A screen will be provided for each room. LCD projectors and laptops will **not** be provided. One workshop per application please.

| Company/ | Organizatio | n | |
|-------------|----------------|--|--------------------------|
| (Pleas | se list comp | any name as you wish it to appea | ar on printed materials) |
| | | Email | |
| | | | |
| Contact A | ddress: | | |
| Telephone | : | Fax: | |
| | Title: | | |
| | | escription: | |
| | | | |
| | | | |
| | | | |
| | | | |
| (Desc | ription will b | be appear in Final Show Program | of Southeastern Biology) |
| Please indi | cate which tir | ne slot you prefer below: | |
| Pre-Confere | ence Worksh | op On Wed 4pm-5:30pm | |
| | | Thurs 10:30am-12noon Thurs)am-10am | 1:30pm-3pm Thurs |
| Qty | Item | | Amount |
| | Works | hop Fee (Included With Booth Paym | ent) n/a |
| | Works | hop Fee (Without Exhibiting) | \$300 |
| | Total \ | Norkshop Amount | \$ |

Hold Harmless Clause

The workshop presenter assumes all responsibility and liability for losses, damages and claims arising out of injury to the presenter's display, equipment and other property brought upon the premises of the convention facilities and shall indemnify and hold harmless the association agents, servants and employees as well as the ASB organization from any losses, damages and claims.

Upon acceptance by ASB, this signed application and Workshop Contract form becomes the contract for booth rental for the 2007 ASB Annual Convention. Workshop presenter will be notified of their acceptance by letter no later than 31 Jan. 07. Refund Policy: 50% on or before 31 Jan. 07, 0% on or after 1 Feb. 07.

Signature Date

Title e-mail

Return Form with Check or Credit Card Information by **January 31, 2007** to: Scott Jewell, ASB Meeting Planner, PO Box 1088, Mebane, NC 27302; 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax. A2Zconvention@yahoo.com.

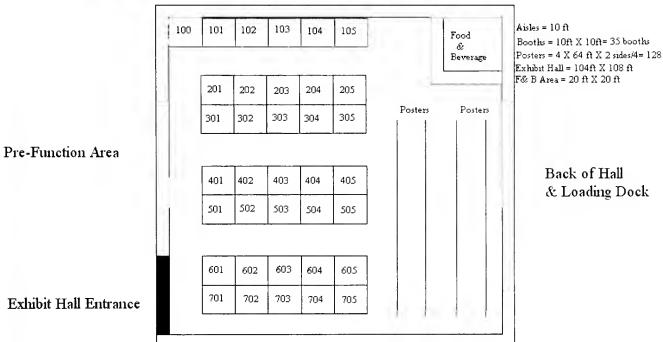
(4



68th Annual ASB Exhibit Hall Floor Plan



Columbia Mertopolitan Convention Center Exhibit Hall Association of Southeastern Biologists April 17-20, 2007



*Exhibitor Service Kits to be mailed by 15 March 2007

Industry Partners Form

2007 Association of Southeastern Biologists April 18-21, 2007, Columbia, SC Columbia Convention Center

| | PS, I Would Like To Partner With ASB And Part rogram!! | icipate In the Industry Partners |
|---|--|----------------------------------|
| Company/0 | Organization | |
| Poproconte | (Please list company name as you wish | • • • |
| Address: | ative:Email | |
| Contact Ac | ddress: | |
| | :Fax: | |
| *Special R | ecognition at Thurs Night Social, Friday Night Ba n Center and a listing in Final Show Program of | anquet, signage at the |
| Qty | ltem | Amount |
| | Wed Night Cash Bar (4 Opportunities) | \$500/opportunity |
| | Coffee Breaks (8 Opportunities) | \$500/opportunity |
| | Tote Bag Logo (4 Opportunities) | \$750/opportunity |
| | Thurs Night Social (4 Opportunities) | \$900/opportunity |
| | Fri Night Banquet Cash Bar | \$850 |
| | Yes I wish to present a workshop | See Workshop Form |
| | 24 Hour Exhibit Hall Security | \$1,000 |
| | ASB Executive Committee Breakfast | \$350 |
| | Yes I would like to Donate an Item to the | |
| | Silent Auction to help with Student Travel | |
| | ASB Web Site Hot Link to Your Company (12 months) | \$375 |
| Yes I would like an AD in all 4, 2007 issues of Southeastern Biology, choice) | | |
| | ¼ page = \$200, ½ page = \$325, full page = \$ | 3425 |
| | AD in Final On-Site Program (circle choice) | |
| | ¼ pag e= \$175, ½ page = \$225, full page = \$ | 275 |
| | Industry Partners Total | \$ |
| Signature | , | Date |
| Title | e-mail | |

Return Form With Check or Credit Card Information by **31 Jan. 2007** to: Scott Jewell, ASB Meeting Planner, PO Box 1088, Mebane, NC 27302; A2Zconvention@yahoo.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.



Exhibit Hall Badge Form

2007 Association of Southeastern Biologists April 18-21, 2007, Columbia, South Carolina Columbia Convention Center

FAX This Completed Form Before 3/01/07 To Scott Jewell, ASB Meeting Planner

FAX # 336/421-3425

| Company/Organization | | |
|----------------------------|------|--------|
| Name | City | State_ |
| 1. | | |
| 2. | | |
| Additional Badges \$130/ea | | |
| Name | City | State |
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| | | 40134 |

Note: Each Company receives two complimentary exhibit hall passes per 10' X 10' or tabletop booth payment. Badges are to be used for company employees only. Partnering companies must pay \$130 to register for the ASB Conference.

BADGES MUST BE WORN TO BE ADMITTED INTO ALL FUNCTIONS!!!



Re-Cap & Payment Information

| Exhibiting F | otion Full Booth | | | | Aount \$ |
|--|--|-----------------|-----------------------------|---------------|-------------|
| Exhibiting 1 | able Top | | | | \$ |
| Publishers | Book Exhibit | | | | \$ |
| Advertising | | | | | \$ |
| Industry Pa | rtners | | | , | \$ |
| Total | | | | | \$ |
| Jewell, ASB Me | r completed registration seting Planner, PO Bosell, 336/421-0034 office | x 1088, Mebane | e, NC 27302; <u>A2</u> | | |
| Visa | MasterCard | | Discover | | |
| | MasterCard E | xp/ 3 digit | _Discover : code on back | of credit car | rd// |
| CC# | _ | | code on back | | |
| CC# CC# CC# CC# CC# CC# | pears On Card | | code on back | | |
| CC# Name As It Ap Credit Card Bi *Last Name | pears On Card | | code on back *First Name | | |
| Name As It Ap Credit Card Bi *Last Name_ *Company/Orga *Address_ *Line 2_ *City_ | pears On CardE | *State_ | *First Name*Posta | I Code | |
| Name As It Ap Credit Card Bi *Last Name *Company/Orga *Address *Line 2 *City | pears On CardE | *State_ | *First Name_ | I Code | |
| CC# Name As It Ap Credit Card Bi *Last Name *Company/Orga *Address *Line 2 *City *Phone Office Use | pears On CardE | *State_ | *First Name*Posta | I Code | |

JOURNAL CHANGES

The Print Editor, James Caponetti, in consultation with the Archivist, John Herr, and with the approval of the Executive Committee, has made changes in the month of journal issue with a concomitant re-distribution of some items of information. The objective is to consolidate some items of information in successive issues, avoid repetition, solve some problems, and reduce journal costs. Beginning with Volume 54 for 2007, there will be January, April, July, and October issues. This sequence will place information in a more chronological order through the year, and will place the issues on an even distribution of two months apart leading to a more timely communication with the membership.

THE JANUARY ISSUE

The January issue will contain information on the subsequent annual meeting in April including information on the host institution/meeting site/events, tentative program, registration information, plenary speaker/symposia/workshops/exhibitors information, local arrangements committee list, affiliate societies list, and special reminders page. Other items will include the Wednesday and Saturday Executive Committee meeting minutes from the previous April meeting, Southeastern Naturalist information, book reviews, news of biology in the Southeast, obituaries, and commercial/patron member advertisements.

THE APRIL ISSUE

The April issue will contain the message from the President, the ASB candidates for office list with biographies/pictures, complete annual meeting information with up-dates/changes, final program summary, complete workshops/exhibitors list, a scheduled listing of paper/poster/symposium sessions, special reminders page, and other items (*Southeastern Naturalist* information, etc.). The abstracts will go into the July issue.

THE JULY ISSUE

The July issue will contain the past September interim Executive Committee meeting minutes, the AIBS and AAAS representative's reports, the annual business meeting minutes from the April meeting, the paper/poster/Beta Beta Beta abstracts with author index of only those papers/posters presented at the annual April meeting, special reminders page, and other items (Southeastern Naturalist information, etc.).

THE OCTOBER ISSUE

The October issue will contain the message from the President, the events of the previous April meeting (awards, etc.), resolutions, Treasurer's reports, Past President's report, plenary address, symposia summaries, newly appointed committees list, the Call for Papers for the next annual meeting, special reminders page, the nominations for office page, the award announcements for the next year, and other items (Southeastern Naturalist information, etc.) including the required USPS ownership pages. $\[\[\] \]$

AVAILABLE POSITIONS IN THE SOUTHEAST

Position: Biomedical Biologist **Institution:** Morehouse College

Location: Georgia

Description:

The department seeks an early career scientist for a tenure-track faculty position at the assistant professor level. This individual must possess a Ph.D. with post-doctoral training in a biomedical discipline. The candidate must establish and maintain a research program with the potential to incorporate genomics/bioinformatics. Morehouse College is a selective liberal arts institution. Teaching obligations will include introductory level biology. The proposed starting date is August 2007. Applicants must submit a CV, description of teaching experience and philosophy, description of research interests and career goals, and the names and contact information for three references to: David B. Cooke III, Professor and Chair, Department of Biology, Morehouse College, 830 Westview SW. Atlanta. 30314. Drive. GA by e-mail dcooke@morehouse.edu. Deadline is January 1, 2007. Morehouse College is an equal opportunity, affirmative action employer.

Position: Botanist/Wetlands Ecologist

Institution: Breedlove, Dennis & Associates, Inc.

Location: Florida Description:

Breedlove, Dennis & Associates, Inc. (BDA), headquartered in Winter Park, Florida, has an immediate need for an experienced scientist to service our clients' needs in wetland delineation, permitting, threatened or endangered species review, and project management. Candidates should have a graduate level degree and field experience with the Southeastern flora, particularly subtropical Florida. Candidates should also have demonstrated capabilities in technical writing and project management. BDA offers a competitive salary and benefits in a highly desirable area in Central Florida.

Submit resumes to: W. Michael Dennis, Ph.D., President, Breedlove, Dennis & Associates, Inc., 330 W. Canton Ave., Winter Park, FL 32789. mike@bdainc.com.

Position: Associate Scientist

Institution: Breedlove, Dennis & Associates, Inc.

Location: Florida Description:

Breedlove, Dennis & Associates, Inc. (BDA), headquartered in Winter Park, Florida, has an immediate need for a junior level associate scientist to service our clients' needs in wetland delineation, wetland monitoring and reporting, wildlife surveying, erosion sediment control inspecting, and similar field studies. Candidates should hold either a bachelor's or master's degree in one of the biological sciences with one to three years of experience related to the job duties described above. Candidates should also have strong analytical and technical writing skills. BDA offers a competitive salary and benefits package including the opportunity for tuition reimbursement.

Submit resumes to: W. Michael Dennis, Ph.D., President, Breedlove, Dennis & Associates, Inc., 330 W. Canton Ave., Winter Park, FL 32789, mike@bdainc.com.

Position: Botanist/Wetlands Ecologist

Institution: Breedlove, Dennis & Associates, Inc.

Location: Florida

Description:

Breedlove, Dennis & Associates, Inc. (BDA), is a natural resources consulting firm headquartered in Winter Park, Florida, has an immediate need for an experienced scientist to conduct ecological studies including vegetation mapping, wetlands delineating, protected species surveying, and environmental permitting. Strong field skills and knowledge of the Southeastern flora, especially sub-tropical Florida, are essential.

Submit resumes to: W. Michael Dennis, Ph.D., President, Breedlove, Dennis & Associates, Inc., 330 W. Canton Ave., Winter Park, FL 32789. mike@bdainc.com.

Position: Geneticist

Institution: Rhodes College

Location: Tennessee

Description:

The Department of Biology at Rhodes College seeks applicants for a full-time faculty appointment for a one-year sabbatical replacement, at the rank of Assistant Professor, to begin in August of 2007. Candidates must have a Ph.D. and a strong interest in teaching at the undergraduate level. Teaching responsibilities will include an upper-level course in Genetics with an experimental laboratory, a team-taught introductory course, and a senior seminar or other specialty course.

Applicants should submit a letter of application, curriculum vitae, transcripts of undergraduate and graduate work, statement of teaching philosophy, and three letters of recommendation. Review of completed applications will commence on December 15, 2006 and will continue until the position is filled.

Founded in 1848, Rhodes College is a highly selective college of the liberal arts and sciences. Memphis provides the cultural and social amenities of a city of one million residents.

Applications and inquiries should be directed to: David Kesler, Ph.D., Chair, Genetics Search Committee, Department of Biology, Rhodes College, Memphis, TN 38112. kesler@rhodes.edu. (901) 843-3557. www.rhodes.edu/biology.

Rhodes College is an equal opportunity employer committed to diversity in the workforce and strongly encourages applications from women and minority candidates (see http://www.rhodes.edu/about/376.asp).

Position: Physiologist/Biologist **Institution:** University of Montevallo

Location: Alabama

Description:

The University of Montevallo, a member of the Council of Public Liberal Arts Colleges (COPLAC), invites nominations and applications for positions available in August 2007. With an enrollment of approximately 3,000, UM is Alabama's

public liberal arts university, offering baccalaureate and master's degree programs with an emphasis on high quality education and innovative teaching. Adjacent to Birmingham, in one of the nation's fastest growing counties, Montevallo provides attractive living in a moderate climate with ready access to metropolitan and recreational resources.

Biology--Teach anatomy, physiology, developmental biology, and introductory courses. Scholarly activity involving undergraduates expected. Postdoctoral and teaching experience preferred. Apply to: Dr. Scott Peterson, Chair, Department of Biology, Chemistry, and Mathematics, Station 6480.

Position: Microbiologist

Institution: Military College of South Carolina

Location: South Carolina

Description: Assistant Professor, Biology

Candidates should possess a Ph.D. in Microbiology with a specialization in microbial physiology, environmental microbiology, or microbial ecology preferred. Primary teaching responsibilities will include general microbiology at the undergraduate and graduate levels, undergraduate and graduate specialty courses in the candidate's area of interest, and participation in the department's introductory biology courses. Individuals with interest and experience in the development of General Biology courses for non-science majors are especially encouraged to apply. Please reference F06-32CIHE. www.citadel.edu/hr.

Position: Cellular and Developmental Biologist **Institution:** North Carolina A&T State University

Location: North Carolina

Description:

North Carolina A&T State University enjoys a longstanding national reputation in learning, discovery and engagement. With a student body of over 11,000 and 450 faculty, A&T offers undergraduate and graduate degrees through its eight schools and colleges in addition to certification and certificate programs. The College of Arts and Sciences is the largest academic unit at NC A&T enrolling over 2700 undergraduate and 195 graduate students across 45 degree programs in 12 departments. All faculty positions develop and deliver course content related to the subject area. Quality productivity and a strong commitment to academic research and productivity, publications, along with university, professional, and community service are expected.

An earned Ph.D. in an appropriate discipline is required. Interested applicants should send a letter of application, curriculum vitae, statement of teaching philosophy, description of research interests, official undergraduate and graduate transcripts and three letters of reference to: Dr. Michael A. Plater, Dean, College of Arts and Sciences, North Carolina A&T State University,1601 E. Market St., Geensboro, NC 27411.

Position: Cell and Molecular Biologist

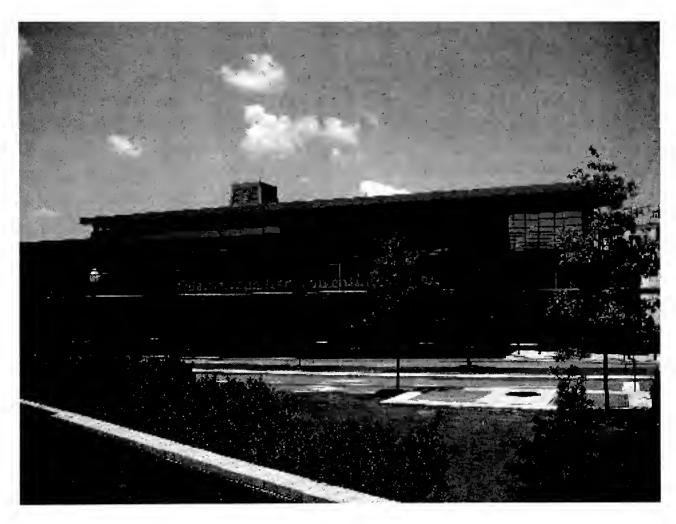
Institution: Oxford College of Emory University

Location: Georgia

Description:

The Department of Biology at Oxford College of Emory University seeks a tenure track assistant professor to begin August 2007. Oxford College

(http://www.emory.edu/OXFORD), located 38 miles east of Atlanta, is a two-year, liberal arts, residential college of Emory University. A Ph.D. in neurobiology or related area or expectation of degree completion this academic year is required. The successful candidate will contribute to a foundation course called Cell and Molecular Biology, teach Human Anatomy and Physiology, and develop their own course in neurobiology. The position includes participation in University-wide cross-disciplinary programs such as Neuroscience, Behavior and Biology (NBB) and Global Health. Opportunities also exist to mentor student research in a liberal arts intensive environment. Applicants must submit a letter of application, curriculum vitae, statement of teaching philosophy, transcripts, and 3 reference letters to Dr. Stephen Henderson, Chair, Biology Search, Oxford College of Emory University, Oxford, Georgia 30054. Review of applications will begin December 1, 2006. AA/EOE. ©3



AWARDS FROM THE AMERICAN SOCIETY OF ICHTHYOLOGISTS AND HERPETOLOGISTS

2006 AWARDEES

Robert H. Gibbs, Jr. Memorial Award

Presented for excellence in systematic ichthyology. In July 2006, at the ASIH annual meeting in New Orleans, Louisians, the award for 2006 was presented to **Richard Winterbottom**, Department of Natural History, Royal Ontario Museum, Toronto, Ontario, for outstanding contributions to mycology of fishes, systematic relationships of many bony fishes (and was an early practitioner of Hennigian phylogenetics), and historical biogeography.

Henry S. Fitch Award

Presented for excellence in herpetology. In July, 2006, at the ASIH annual meeting in New Orleans, Louisians, the award for 2006 was presented to **J. Whitfield Gibbons**, Savannah River Ecology Laboratory, Aiken, South Carolina.

Robert K. Johnson Award

Presented for excellence in service. In July 2006, at the ASIH annual meeting in New Orleans, Louisians, the third Robert K. Johnson award was presented to **Carter R. Gilbert**.

Raney Fund Awards

Awards of \$832 were made to each of the following six young ichthyologists in 2006. The committee received 36 applications with many excellent proposals worthy of support. The committee had \$5,000 to award. In previous years the committee awarded \$1,000 to the top five applicants; this year we have two applicants tied at fifth place and thus decided to divide this equally among the top six applicants. These are listed below in alphabetical order.

Shannon C. DeVaney, Ph.D. student, The University of Kansas, sck@ku.edu, "Molecular systematics of deep-sea dragonfishes and allies (Teleostei: Stomiiformes)."

Ron I. Eytan, Ph.D. student, Louisians State University, reytan1@Isu.edu, "Phylogenetic analysis of microhabitat differentiation and metabolic rate in the reef fish genus *Acantheblemaria*."

Lucy R. Harrison, Ph.D. student, Simon Fraser University, lucyh@sfu.ca, "Estrogens in the sea: Effects on sex-changing coral reef fishes."

Alison Mitchell, M.A. student, University of Colorado at Boulder, alison.mitchell@colorado.edu, "Microhabitat use and niche overlap of native *Catostomus discolobus* (bluehead sucker) in sympatry and allopatry with non-native *Catostomus commersonii* (white sucker)."

Marina L. Ramon, Ph.D. student, University of California, Santa Cruz, ramon@darwi,uscs.edu, "Searching for adaptive genes using a global approach."

Catherine E. Wagner, Ph.D. student, Cornell University, cew35@cornell.edu, "Genetic and morphological diversification among Lake Tanganyikan endemics: Patterns of diversity in tropheine cichlids."

Gaige Fund Awards

Awards of \$500 were made to each of the following 10 young herpetologists in 2006.

Philip Bergmann Julie Ray

Jennifer Curtis Gabriel Rivea

Matt Gifford Rebecca Symula

Myra Hughey Maria Thaker

Ali Rabatsky Nathan Turnbough

Stoye Awards

Awards for best oral presentations were made to each of the following four students in 2006. Each winner received a cash award of \$250, a certificate, and all available back issues of *Copeia*. They are listed by name and category.

Brian L. Sidlauskas—General Ichthyology.

Jacob J. D. Egge—Genetics, Development, and Morphology.

Gregory B. Pauly—Ecology and Ethology.

R. J. David Wells—Conservation.

Storer Awards

Awards for best poster presentations were made to each of the following two students in 2006. Each winner received a cash award of \$250, a certificate, and all available back issues of *Copeia*. They are listed by name and category.

Kenneth G. Blanke—Ichthylogy.

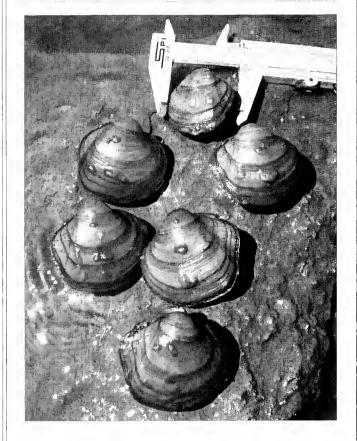
Kristin A. Bakkegard—Herpetology.

The Southeastern Naturalist . . .

- ◆ A quarterly peer-reviewed and edited interdisciplinary scientific journal with a regional focus on the southeastern United States (ISSN #1528-7092).
- Featuring research articles, notes, and research summaries on terrestrial, freshwater, and marine organisms, and their habitats.
- Focusing on field ecology. biology, behavior, biogeography, taxonomy, evolution, anatomy, physiology, geology, and related fields. Manuscripts on genetics, molecular biology, anthropology, archaeology, etc., are welcome, especially if they provide natural history insights that are of interest to field scientists. Symposium pro-ceedings are occasionally published.
- Indexed in Biological Abstracts (BIOSIS), BIOSIS Previews, CAB Abstracts, Cambridge Scientific Abstracts, EBSCOhost, Environmental Knowledgebase (formerly Environ-

Southeastern Naturalist

Volume 5 2006 Number 3



mental Periodicals Bibliography), FISHLIT (Fish and Fisheries Worldwide; Aquatic Biology, Aquaculture, and Fisheries Resources), Wildlife Review Abstracts, and Zoological Record (BIOSIS UK). Arrangements for indexing in Elsevier BIOBASE (Current Awareness in Biological Sciences), and ISI Services (Science Citation Index-Expanded, ISI Alerting Service, and Current Contents/Agriculture, Biology, and Environmental Sciences) are pending.

- A sister journal of the *Northeastern Naturalist* (ISSN #1092-6194), published since 1997. Both journals are identical in focus, format, quality, and features. The journals together serve as a matched-pair of regional journals that provide an integrated publishing and research resource for the eastern part of North America.
- Printed by Allen Press, printer of many journals in the biological and environmental sciences, especially those whose parent organization is a member of the American Institute of Biological Sciences (AIBS).
- ♦ Available online in full-text version in the BioOne database (www.bioone.org, a collaborative effort of Allen Press, AIBS, and other organizations) and the Proquest Information and Learning databases (www.il.proquest.com).
- ◆ For information, instructions for authors, and subscriptions: Southeastern Naturalist, PO Box 9, 59 Eagle Hill Road, Steuben, ME 04680-0009; 207-546-2821, FAX: 207-546-3042; mailto:office@eaglehill.us; http://www.eaglehill.us/jsgeninf.html. Online secure ordering of subscriptions is available!

Southeastern Naturalist

| Volume 5 | 2006 | Number 3 | |
|---|--|---------------------------|-----|
| CONTENTS | | | |
| Increase of Unionid Mussel Popu Edwin J. Miller and Sean T. L | | Kansas, from 1991 to 2003 | 383 |
| Influence of Catchment Disturbar Semotilus thoreauianus (Dixie Chu | nce on <i>Pteronotropis euryzonus</i> (B1 | • | 393 |
| Analysis of Spawning Behavior, Etheostoma scotti, Cherokee Dar Casey M. Storey, Brady A. Po | | · | 413 |
| Microhabitat Use by Introduced in North Central Florida Patricia Gomez-Zlatar, Michae | Hemidactylus turcicus (Mediter | ranean Geckos) | 425 |
| The Salamanders Eurycea longic Monitoring and Observations on Nathan Taylor and Jonathan N | rauda and <i>Plethodon glutinosus</i> i Ecology and Natural History | n Gregorys Cave, TN: | 435 |
| Food Habits of <i>Macrochelys tem</i> Louisiana Ruth M. Elsey | minckii (Alligator Snapping Tur | rtle) from Arkansas and | 443 |
| Intra-annual Loggerhead and G | reen Turtle Spatial Nesting Patte Bagley, and Llewellyn M. Ehrhar | | 453 |
| Status of <i>Pitnophis ruthveni</i> (Lou D. Craig Rudolph, Shirley J. E and Ricky W. Maxey | nisiana Pine Snake) Burgdorf, Richard R. Schaefer, Ric | chard N. Conner. | 463 |
| Survey and Monitoring of Specie Northeastern Florida Christopher J. Gregory, Raym | es at Risk at Camp Blanding Tra ond R. Carthy, and Leonard G. Pe | | 473 |
| Vegetative Survey of Wetland H. and Preserve in Southeastern Lo Lauren E. Nolfo-Clements | abitats at Jean Lafitte National | | 499 |
| Range and Ecology of Helenium Rhonda L. Rimer and James V | | ks | 515 |
| Burrow Dispersion of Central Fl Alton Emory Kinlaw | orida Armadillos | | 523 |
| Food Habits of Reintroduced Ell Jennifer Schneider, David S. M and Brian C. Reeder | k in Southeastern Kentucky Maehr, Karen J. Alexy, John J. Co. | x, Jeffery L. Larkin, | 535 |
| Breeding Biology of Red-winged John W. Prather and Alexande | | | 547 |
| Effect of Time and Barred Owl I in East-central Mississippi H. Dawn Wilkins and Michael | | Woodpeckers | 555 |
| Evaluating Red-cockaded Wood Parasites | peckers for Exposure to West Ni rdson, Kristina F. Egstad, and Den | | 561 |
| Rook Reviews | doon, Mionna i . Destad, and Den | mo mi tromoj | 566 |

Classified Ads for Northeastern and Southeastern Naturalist

Classified ads offering opportunities for people with career interests in the natural history sciences may now be placed in the *Southeastern* and/or *Northeastern Naturalists*, within the following categories.

Faculty positions at colleges and universities Graduate student fellowships and assistantships

Postdoctoral research opportunities

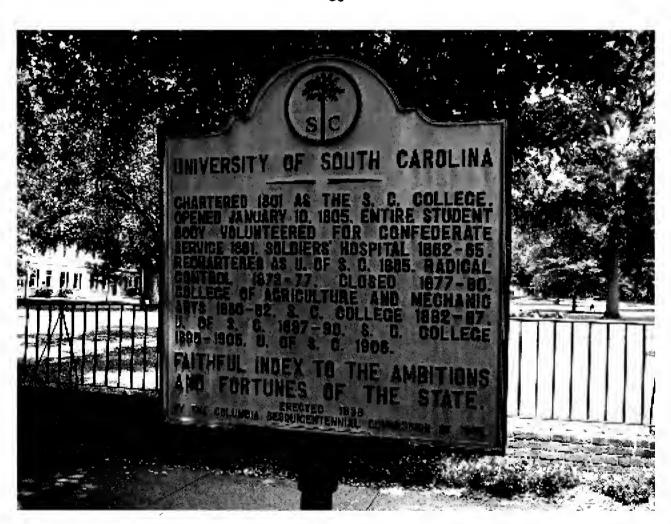
Field biologist positions

Requests for funding proposals

Announcements of scientific meetings and conferences

Ads need to be received by February 20, May 20, August 20, and November 20, and must be placed over the web at http://eaglehill.us/Merchant2/merchant.mv. Journal issues mail about one month later. Rates are a modest \$.03/character, with a \$5 minimum. Space allocated to classified ads within the journal is limited. Ads will be reviewed prior to acceptance.





BOOK REVIEW

Debbie Moore, Review Editor
Department of Natural Sciences
P. O. Box 8368, Troy University
Dothan, AL 36304-8368

Eidse, Faith. 2006. **Voices of the Apalachicola**. University Press of Florida, FL. \$29.95. 327 p.

Raymond Arsenault and Gary R. Mormino are coeditors of a series they explain is "devoted to the study of Florida history and culture." Voices of the Apalachicola, the latest of this series, is an anthology of collected interviews compiled and edited by Faith Eidse and staff of the Northwest Florida Water Management District from a cross section of 20th Century inhabitants of the Apalachicola River area of northwest Florida. Each of the interviewees brings their own experiences and perspectives to the reader. Faith Eidse has done an excellent job of bringing these individual recollections, memories, stories, and opinions together in one collection that is cohesive while letting the individual voices be heard. The primary period covered is the 1900's and the voices cover the spectrum of perspectives on the Apalachicola River system. From the "River Roots" told by Creek Chief Ramsey to the steamboat era, the "Fishing a Sandy River" tales of local fisherman to the "Oystering, Shrimping, Fishing, Sponging the Bay" tales to stories of the "Turpentine, Timber, and Restoring Tate's Hell" to "Logging 'External Wood'" to Angus Gholson's (a noted field botanist of the first order) reflections on the endemic Torreya Trees to "King Cotton, Tupelo Gold (some of the finest honey in the world), and Cracker Cattle" to "River as Trade and Commerce Opportunity," the history of the river over the last 100 years unfolds. This is a book for biological reading between the lines. Human pertubations on the river are chronicled through the anecdotal historical accounts while the ecological consequences of these pertubation are revealed.

W. MICHAEL DENNIS, Ph.D., Breedlove, Dennis & Associates, Inc., Winter Park, Florida.

OBITUARY

Ronald R. Cowden, 1932-2006

IN MEMORIAM

PROFESSOR DR. RONALD REED COWDEN, Count von Eigen, Professor *Emeritus* Biophysics, James H. Quillen-Dischner College of Medicine, East Tennessee State University, cell biologist, embryologist, renowned in fluorescence cytochemistry, academician, marine biologist, and scientific journalist, died March 17, 2006, in Mobile, Alabama (USA). He was 74.

Dr. Cowden was most renowned for his work in fluorescence cytochemistry, at one time considered one of the three experts in the world (along with Dr. Richard Horobin of Scotland and a pioneer in Spain). He was also noted for his research of marine invertebrate embryos, and in the quantitative cytochemistry of nuclei. Dr. Cowden had been instrumental in the establishment of the James H. Quillen School of Medicine at East Tennessee State University, Johnson City, Tennessee.

Born in Memphis, Tennessee, he attended Monroe, Louisiana, public schools, graduating from Neville High School in 1948. After a year at the University of Mississippi studying Biology and German, and a semester at the University of New Mexico, he was graduated in 1953 from Louisiana State University, Baton Rouge, Louisiana(USA), with a B.S. in Zoology and German. Dr. Cowden received his Ph.D. from the University of Vienna, Austria, in 1956 with a major in Zoology (Dissertation work at Institut für Allgemeine Biologie der Medizinische Fakutat, F. M. Mainx, Director) and a minor in Anthropology. While studying in Europe, he was invited for a summer of research at the Karolinska Institutet (Sweden).Returning to the United States he completed his Postdoctoral work in the Biology Division at Oak Ridge National Laboratory, Oak Ridge, Tennessee, as a USPH Post Doctoral Fellow (where Dr. Alan D. Conger was his mentor).

Dr. Cowden spent his career pursuing his passion for researching and teaching biological and medical sciences at colleges and universities throughout the United States, with sabbaticals in Germany, Italy, France and South Africa. His early career began with a position as Assistant Professor of Biology at The Johns Hopkins University in 1957-60, followed by a term as an Assistant Member of the Cell Biology team, Institute of Muscular Disease, NYC, in 1960-61. He then served as an Assistant Professor of Pathology at the University of Florida, Gainesville, in the JH Midler Health Center, in 1962-66, and later as an Associate Professor of Anatomy at LSU Medical Center, New Orleans, LA, 1966-68.

As he began his first full professorship and Chairmanship of the Department of Biological Sciences at the University of Denver, where he served from 1968 to 1972, the <u>Denver Post</u> reported Dr. Cowden stated he set as his goal to lead his department of sciences into "achieving International relevance" by building "a research oriented faculty", a goal he kept repeating. In 1972-75, he served as Professor and Chairman of Anatomy at Albany (N.Y.) Medical College.

Obituary

In 1975, he became Associate Dean of the basic sciences at the proposed College of Medicine at East Tennessee State University. As a member of the original organizing team, he formed and shaped the sciences basic to the practice of the healing arts: Biochemistry, Anatomy, Physiology, Microbiology and Pharmacology. Dr. Cowden developed the programs instrumental to the Medical School receiving the largest grant awarded by the VA for Basic Science Development at the East Tennessee State University and the College of Medicine. He was the initial research investigator in the Graduate Programs of the Biomedical Sciences. Dr. Cowden and Ian Smith, M.D. (Professor Emeritus lowa State University) recruited a faculty of distinguished medical and clinical scientists to form a school that is ranked by US NEWS and WORLD REPORT(2005) as third in the nation in the teaching of generalized medicine.. His international reputation and administrative skills had been critical to establishing the school's present position as "one of the best schools in the country for the training of primary care physicians." Dr. Cowden retired in 1986 as Professor Emeritus of biophysics, Department of Cellular Biophysics, the new Medical College Department he had established in 1980.

At the time of his death, Dr.Cowden was working to establish his own Coastal Biomedical Research Laboratory in Mobile, Alabama (USA).

Dr. Cowden was a Trustee for The Bermuda Biological Station in St. Georges, Bermuda for 11 years. When he was invited to become a Fellow of the Royal Microscopical Society, in 1966, only two other Americans were members, both much older than he. He was a recipient of a USPHS Career Development Award (1962-66).

A prolific scientific author, he contributed over 120 articles to professional journals throughout the world. His experience on the editorial boards of eleven international scientific journals, often as an Editor, included: *Histochemical Journal* (London), Associate Editor, 1968-74; *Journal of Experimental Zoology*, 1969-73, 78-82; *Transactions of the American Microscopical Society*, 1971-95; *The Journal of Morphology*, 1972—; *Histochemistry* (Berlin),1976-86; *Acta Embryologia et Morphologiae Experimentalis, Nova Seria* (Palermo), 1978-93; *European Journal of Histochemistry*, 1984—; *Aspects of Sponge Biology*, coeditor, 1976; *Devel. Biology of Freshwater Invertebrates*, 1982; and, *Advances in Microscopy*, 1984.

Dr. Cowden was listed in *Who's Who in Medicine and Health Care*. He was a member of Sigma Xi, the Histochemical Society of North America (Program chair 1981-84),Tri Beta Science Fraternity (inducted into membership as a sophomore at LSU), the Royal Microscopial Society (Fellow), American Association Zoologists, American Society of Cell Biology, La Asociacion Panamericana de Anatomia, American Association of Anatomists, Society for Invertebrate Pathology, Association of Southeastern Biologists, Society of Western Naturalists and the Society for Developmental Biology.

Dr. Cowden served his country as a member of the Special Detail for the Central Intelligence Agency in the 1950s and 1960s. Friends in the world knew him as quite knowledgeable and most enthusiastic for opera. He had turned practice pages in Vienna for students who later became Metropolitan stars and he once conducted the Vienna Orchestra in a practice session, substituting for an

ill conductor. His other interests included tracking wild game, camping, canoeing, and football.

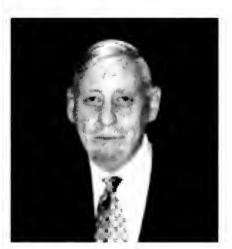
As his good friend and colleague Robert Rasch, M.D., Ph.D., said, "He was a beloved colleague who always had a story or joke to share with others. His brilliance in creative ideas for research, phenomenal memory for scientific citations and willingness to undertake daunting challenges will be sorely missed. "His mind, like his interests, had no boundaries."

Professor Doctor Cowden was preceded in death by his first wife, Beverly Marie Louise Sherwood of New Orleans, Louisiana. He is survived by his wife, Ann Tiffin Hays Greer Cowden, and her daughter, Vidmer Greer Flynn (Mrs. P. Robbins) and her grandchildren, Miss Vidmer Tiffin Greer, William Sanford Greer III and Mac Barton Greer II. A Memorial service was held at St. Paul's Episcopal Church on Monday, March 20, 2006, and interment was in the Old Spring Hill Cemetery, Mobile, Alabama.

Ann-Tiffin G. Cowden, 2503 South Delwood Drive, Mobile, Alabama 36606.







Ronald Reed Cowden

A Letter from a Friend

Reprinted with Permission.

Angust 2, seco

GEORGETOWN UNIVERSITY
WASHINGTON, D.C. 20087-1229

Team withing this letter at the Tame of the Team of the state of the surger of the team of the surger of the later husband, it is graphical asticle about her late husband, its.

Round Counter.

It. Consider was an except it hally

talented extracted and administrator and tracker.

He was also cathorising in his service on the

edidorial brands of minials. The atence community

edidorial brands of minials. The atence community

has lost one at its brightest and most giring stars.

has lost one at its brightest and most giring stars.

haplacement is impossible. Detro. Courters on ticle

should serve as a guide to all of us of the

should serve as a guide to all of us of the

meaning of service and collegialty.

There you will agree that the

teaders of jour journal should be aware

at the accomplishments of this tire

of the accomplishments of this tire

gentleman, scientist and scholar.

Pedices of Biology Felling, Anthrican Headening of Mirrobiology

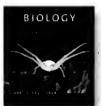
THOMSON

BROOKS/COLE

Proud to be a patron member of the ASB!

For more information, or to request review copies, please visit us at www.thomsonedu.com/biology.

Available Now from Thomson Brooks/Cole!



Cecie Starr/Chris Evers/ Lisa Starr

Biology Today and Tomorrow with Physiology, Second Edition Casebound: 0-495-10919-3.

Paperbound: 0-495-01654-3. @2007. With clear and engaging writing, trend-setting art, and unparalleled media, this concise text engages students, links concepts from chapter to chapter, helps you easily monitor students' progress, and simplifies lecture prep.



Cecie Starr/ Beverly McMillan Human Biology,

Seventh Edition

0-495-01596-2. ©2007. Fine tuned for greater clarity and a more logical flow of ideas, this new edition presents core areas of human

biology with a focused presentation that is ideal for non-majors.



Cecie Starr/Ralph Taggart Biology: The Unity and Diversity of Life, Eleventh Edition 0-495-01599-7. ©2006.



Michael Barton Bond's Biology of Fishes, Third Edition

0-12-079875-1. ©2007. This revision of Bond's classic text features a new 4-color insert of over 150 photos.



Lauralee Sherwood Human Physiology: From Cells to Systems, Sixth Edition

0-495-01485-0. ©2007. Overwhelmingly praised for its central theme of homeostasis, Sherwood's text helps students understand

how the body's systems work together.

G. Tyler Miller, Jr./Scott Spoolman Living in the Environment: Principles, Connections, and Solutions, Fifteenth Edition 0-495-01598-9. ©2007.

Essentials of Ecology, Fourth Edition 0-495-12544-X. ©2007.

Sustaining the Earth: An Integrated Approach, Eighth Edition

0-495-01597-0. ©2007. A Thomson Advantage book. Miller and new contributor Scott Spoolman have scrutinized every line of these new editionsenhancing, clarifying, and streamlining while also updating with the very latest environmental news and research.

New updated editions available now!

Susan R. Barnum

Biotechnology: An Introduction, **Updated Second Edition**

0-495-11205-4. ©2005.

Michael Cummings

Human Heredity: Principles and Issues, **Updated Seventh Edition**

0-495-11308-5. ©2006.

OUTERNET (OP) PUBLISHING

Biology laboratory solutions from Thomson and Outernet Publishing

Outernet offers ready-to-go, easily customized print and media solutions for introductory biology lab courses that combine robust content and interactive media assets. Visit www.thomsoncustom.com/labs.

ASB Patron Members



Carolina™ Synthetic Blood

Take the risk out of blood-typing studies with our safe, convenient, and realistic synthetic blood and antisera kits.

Carolina's synthetic blood and antisera are used to simulate traditional blood-typing activities.

Our kits address the National Science Education Standards and include suggested questions for assessment. Kits include everything needed for a class of 30 students and are available for studies in:

- ABO-Rh Blood Typing (item MG-70-0101)
- Transfusion Matching (item MG-70-0104)
- Blood Group Genetics (item MG-70-0107)
- Frequency of Blood Types (item MG-70-0110)
- Forensics (item MG-70-0113)

To learn more about these kits, visit us online at www.carolina.com/blood.pdf or email steve.binkley@carolina.com.

Carolina Biological Supply Company

2700 York Rd • Burlington NC 27215 800.334.5551 • www.carolina.com





Dedicated to

Problem Solving and Value-Added Solutions

Web Site: http://www.bda-inc.com/home.html

Florida (USA) Office:

BREEDLOVE, DENNIS & ASSOCIATES, INC.

330 W. Canton Ave. Winter Park, Florida 32789 Tel: 407 677-1882 Tel: 800 304-1882 Fax: 407 657-7008

Tennessee (USA) Office:

BREEDLOVE, DENNIS, YOUNG & ASSOCIATES, (TN) INC.

133 Holiday Court Suite 207, Franklin, Tennessee 37067 Tel: 615 599-1996 Fax: 615 599-1998

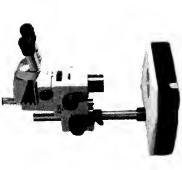
Copyright: Breedlove, Dennis & Associates, Inc. 2000.

Martin Microscope Company

Hame

NEW SONY iCY-SHOT DXC-S500 5MP Digital Camera \$5,750.00...

States, and is a retailer of Company is based in the new and used optical Southeastern United Martin Microscope microscopes and accessories.



Martin Microscope Company 207 South Pendleton Street Easley, SC 29640 USA Phone: 864-242-3424 FAX: 864-859-3332 E-Mail:

Stereomicroscope \$7,000.00 as shown Meiji RZ Research Zoom



company, Martin Microscope sells many brands - providing the best microscopes and accessories of A privately owned independent affordability to our customers. combination of quality and



Microscope with Infinity Plan Achromat Objectives NEW Motic BA450 Laboratory Compound

Visit the website of Martin Microscope: http://www.martinmicroscope.com/index.html

sales@martinmicroscope.com

ASSOCIATED MICROSCOPE

Associated Microscope

P.O. Box 1076

Elon, NC 27244

Tel: (800) 476-3893

Fax: (336) 538-1847

E-mail: info@associatedmicroscope.com Web Site: www.associatedmicroscope.com

PATRON MEMBER OF ASB



Model # 13495211 \$799.00

LEICA Advanced
Compound Microscope
The Vision to Create a Unique Instrument!



Model # Z-30L or Z-45L \$695.00

LEICA ZOOM 2000TM
The Advanced Stereo Zoom Microscope
Of The Future... Today!



SALES AND SERVICE OF MICROSCOPES

A SWIFT

MELJI

DIGITAL CAMERAS

Quality Microscopes for Colleges and Universities Call 1-800-476-3893 to Order!

ASB Membership Form

To join ASB or to renew your membership, please complete the information below and enclose check payable to Association of Southeastern Biologists. Mail to Tim Atkinson, Carolina Biological Supply Company, 2700 York Rd, Burlington NC 27215-3398. If you have any questions, please contact Tim Atkinson at 336 538 6224, FAX 336 538 6322, or e-mail tim.atkinson@carolina.com. Thank you for your support.

We encourage all members to consider a higher level of membership support this year.

| Name | |
|--------------------------|--|
| | tution |
| Address Line 1 | |
| Address Line 2 | |
| | |
| | StateCountry |
| Zip Code | Telephone () |
| Cell Phone () | Fax () |
| E-mail | |
| Regular \$35 | |
| Regular, 3 years \$95 _ | |
| Family \$40 | |
| Student \$15 | |
| Emeritus \$15 | |
| Contributing \$70 | - |
| Sustaining \$140 | |
| Life \$350 | |
| Patron \$750 | |
| Library \$40 | |
| Library, 3 years \$100 _ | |
| | a not-for-profit organization exempt under Internal on 501(c)(3), are tax deductible. We welcome any |

If you wish to subscribe to *The Southeastern Naturalist*, please see page 52 for subscription information.

Southeastern biology. American Museum of Natural History

Received on: 12-26-06





SOUTHEASTERN BIOLOGY VOLUME 54, NUMBER 1, January, 2007 http://www.asb.appstate.edu/

In This Issue

| 2007 ANNUAL MEETING | 1 |
|--|----|
| PORTRAYAL OF THE UNIVERSITY OF SOUTH CAROLINA | 2 |
| TENTATIVE SCHEDULE | 6 |
| Plenary Speaker | 8 |
| Travel to Columbia | 9 |
| FIELD TRIPS | 15 |
| ASB Workshops | |
| SYMPOSIA | |
| Commercial Workshops | 20 |
| Wednesday Night Mixer | 21 |
| Thursday Night Social | 21 |
| FRIDAY NIGHT BANQUET | 22 |
| Activities for Guests | |
| REGISTRATION INFORMATION | 23 |
| HOTEL INFORMATION | |
| LOCAL COMMITTEE ASSIGNMENTS | |
| Affiliate Societies Meeting with ASB | 29 |
| ATBI AND SAFC INFORMATION | |
| SPECIAL REMINDERS FROM THE PRINT EDITOR | - |
| Invitation to Exhibitors and Industry Partners and Advertising | 32 |
| JOURNAL CHANGES | 45 |
| AVAILABLE POSITIONS IN THE SOUTHEAST | 46 |
| ASIH Awards for 2006 | 50 |
| THE SOUTHEASTERN NATURALIST JOURNAL | 52 |
| Book Review | 55 |
| Obituary | 56 |
| ASB Patron Members | 60 |

PATRON MEMBERS

Associated Microscope, Inc., Elon College and Haw River, NC
Tim Atkinson, Burlington, NC
Breedlove, Dennis and Associates, Inc., Orlando, FL
Carolina Biological Supply Company, Burlington, NC
Martin Microscope Company, Easley, SC
Thomson-Brooks/Cole, Belmont, CA
Marilyn Pendley, Maiden, NC